3.4 ECONOMIC AND SOCIAL

3.4.1 SCOPE OF ANALYSIS AND ANALYSIS METHODS

This section describes the methods used to understand the existing economy of the analysis area (subsequently referred to as the "economic impact area"), as well as the potential economic impacts from the Travel Management Planning Project decision. The economic impact area is first described. Then methods to describe the affected environment are summarized. This includes wildland dependency information, data from the most recent national survey on recreation and the environment, and a travel management economic contribution analysis based on Forest Service National Visitor Use Monitoring data.

A. Economic Impact Area

The economic impact area for the economic resource is Ravalli and Missoula Counties in Montana. Access management activities within the project area have the potential to mainly impact the economic conditions of the communities in these counties. These counties are displayed in Figure 3.4-1. Although impacts from this decision are expected to be small for the economy operating in Missoula and Ravalli counties, a few vendors and service providers in those and neighboring counties (and possibly in Beaverhead or Granite counties, Montana or Lemhi and Idaho counties, Idaho) may experience positive or negative impacts. The degree to which the economy and social environment is affected will depend in part on travel plan decisions in adjoining national forests. The analysis area used for the social resource corresponds to the economic impact area, although social issues, especially ones present in this analysis, (e.g., the value of an area being open for motorized use or not), are often not limited by these geographic boundaries. For example, some visitors from across the Northern Rocky Mountain Region, the United States, and other countries have a sense of place and existence values that flow from the conditions of the Bitterroot landscape and natural environment.

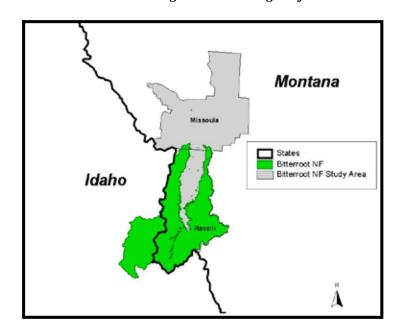


Figure 3.4-1: Bitterroot Travel Management Planning Project Economic Impact Area

B. Affected Environment Methods

Economic information used to describe the affected environment was compiled from various government sources; there was no new data collected specifically for this analysis. Existing county-level and national forest-level data was used to describe trends in the regional economy. County economic profiles are available from the Bureau of Land Management's Economic Profile System (EPS), which compiles and digests primary population and economic data from a variety of government sources into a report. Most information is from the 2006 EPS reports, which include data up to 2006 describing the population, employment, and income composition of the counties comprising the economic impact area for the Travel Management Planning Project. A more recent 2012 version was used to provide updated information on total employment and the most recent average annual unemployment rate. The recent economic conditions vary for the two counties that have the majority of the National Forest System lands in the project area. Highlights of the individual and aggregated EPS reports are presented below to describe the economies that may be impacted by the Travel Management Planning Project decision. The individual county EPS reports contain one additional year of data for several economic indicators, and so there is a mix of durations reported. The reader will note that sometimes the analysis period is 35 years and sometimes it is 36 years.

Wildland dependency data, based on the percent of total labor income (employee compensation and proprietor (self-employed) income) earned in five resource areas was obtained from Gebert and Odell (2006). In these calculations the portion of labor income earned in all economic sectors that is associated with each of five wildland resource areas was calculated for 1993 and 2003. Although these numbers cannot support thorough trend analysis, as they are only two snapshots in time, they do provide some important information.

Travel management economic contribution analysis is also presented to show the existing contribution that various Bitterroot National Forest recreation segments, as observed for 12 consecutive months during 2006 and 2007 with the US Forest Service's National Visitor Use Monitoring (NVUM) program, make to the economic impact area. Economic contributions tied to motorized and nonmotorized activities were estimated to address the economic impact issues tied directly to travel planning.

Employment and labor income contributions were estimated for all current recreation use (i.e., wildlife and non-wildlife recreation activities) on the Bitterroot National Forest, and were then broken into local versus non-local visitation as well as motorized versus nonmotorized activities occurring on the Forest. Expenditure profiles tied to all recreation visitations were estimated to establish the total economic contributions made through recreation activities on the Forest.

Economic contributions can be categorized as direct, indirect, and induced. Direct effects are changes associated with the initial spending by a recreation visitor. Indirect and induced effects are the multiplier or ripple effects resulting from subsequent rounds of spending in the local economy.

Input-output analysis was used to estimate the direct, indirect, and induced employment and labor income effects stemming from motorized and nonmotorized use. Input-output analysis is a means of examining relationships within an economy both between businesses as well as between businesses and final consumers. It captures all monetary market transactions for consumption in a given time period. The resulting mathematical representation allows one to examine the current contributions a sector makes to an economic impact area, as well as the effect of a change in one or several economic activities on an entire economy. These examinations are called "economic contribution analysis" and "economic impact analysis," respectively. Input-output analysis requires the identification of an economic impact area. The economic impact area that surrounds the Bitterroot National Forest was previously defined, and consists of two counties in western Montana.

The IMPLAN Pro input-output modeling system and 2006 IMPLAN data (the most recent data available with sectors bridged to NVUM data) were used to develop the input-output model for this analysis (IMPLAN Professional 2003). The IMPLAN data and software translates changes in final demand for

goods and services into resulting changes in economic effects, such as labor income and employment for the economic impact area. For the economic impact area, employment and labor income contributions that were attributable to all current recreation use (wildlife and non-wildlife activities) and only motorized and nonmotorized activities for the Bitterroot National Forest were generated.

The expenditure and use information collected by the Calendar Year 2003 and the Fiscal Year 2007 NVUM surveys are crucial elements in the economic analysis. The expenditure information was collected by eight spending categories (Stynes and White 2005). The reported spending for each of the categories was allocated to the appropriate industry within the IMPLAN model (the allocation process, also referred to as "bridging," was conducted by the USDA Forest Service, Planning Analysis Group in Fort Collins, CO). The bridged IMPLAN files were used to estimate economic contributions (e.g., employment and labor income) related to existing spending.

Estimated existing Bitterroot National Forest recreation economic contributions (full and part-time jobs and labor income) are displayed in the following ways:

- 1. Estimated employment and labor income based on all, local, and non-local recreation visitation occurring on the Bitterroot National Forest; and
- 2. Estimated employment and labor income by motorized and nonmotorized activity types

C. Economic Consequence Methods

Modeling of economic impacts (changes) using input/output analysis is often conducted to estimate the expected changes in the contribution of jobs and income to local economies resulting from management decisions. In order to model changes to jobs and income, expectations for changes in forest visitation are needed. Although current recreation visitation contributions are provided for the Bitterroot National Forest, due to the uncertainty regarding recreational visitation changes/displacement that may occur following the decision associated with the Travel Planning Project, an economic impact analysis was not conducted for this assessment. Instead, response coefficients are provided to help the reader estimate changes to the existing contributions. These response coefficients are presented in conjunction with a qualitative description of the likely impacts of the various alternatives.

Job and labor income response coefficients would need to be multiplied by marginal or incremental changes in 1,000 party visits for each activity to estimate any potential changes associated with travel planning proposals. In other words, estimates of potential changes to employment or labor income effects would be based on speculation of either increases or decreases of 1,000 party visits to various motorized and nonmotorized activities. For example if the reader believes that hiking would increase by 500 party visits per year under the non-motorized emphasis alternative, the computations to derive effects would require multiplying the hiking response coefficients by 0.5 (500/1,000 party trips) then adding this to current economic contributions. The marginal effects (i.e. response coefficients) are useful for assessing potential changes in the absence of high quality estimates regarding the impacts on visitation under each alternative.

D. Weaknesses, Limitations, and Assumptions of Analysis Methods

In general, it is believed that people that engage in recreation on the Bitterroot National Forest will continue to find opportunities to enjoy themselves, and will continue to support the types of businesses that cater to their needs. Fluctuations in the number of visitors to the Bitterroot National Forest can cause positive or negative economic impacts to local businesses, but these fluctuations are also influenced by much larger trends. The economy and social aspects are affected by a variety of factors including population growth, location of new magnet industries, recession, taxation and other economic policies, the amount of wildfires and smoke in the area, the strength of the national economy, and changing preferences such as people taking several short vacations rather than one long vacation. When compared with these kinds of variables, the management of motorized travel on the Bitterroot National Forest is expected to have a relatively small effect to the economic and social aspects of the local area.

As with nearly all economic reporting, there is a time lag associated with data collection which prevents real-time reporting of economic conditions. The most recent data is typically two years old by the time it becomes accessible. Therefore, efforts to describe the existing situation in reality describe the recent past. This is normally not a large problem since many of the changes happen slowly. However, occasionally changes happen rapidly, as was the case in the autumn of 2008 and spring of 2009, when massive structural changes impacted the US economy at large. Much of the data needed to describe these changes will not be available for several years. As a result, some of the data in the tools used in this analysis (e.g., IMPLAN data) may change substantially in the future.

Another limitation of most economic data is the scale at which it is collected and summarized. The smallest level most data is reported at is the county level. Just as in any case where averaging occurs, county-level data essentially represents the average of all the individuals and communities within that county. Depending on the variability of economic conditions, county-level data may not capture significantly different experiences and conditions across the county.

Yet another similar limitation of this document is the problem of reporting conditions for aggregated economic sectors versus reporting individual industries. The reporting provided in this analysis was done with 2-digit aggregation of the North American Industrial Classification System. Attempting to report data at any finer resolution would cause data omission problems, due to disclosure problems in counties with few firms in any single industry. Even if this data were available, the amount of text needed to cover this type of detail would likely not be advisable given the expected impacts to the economy from this Travel Planning Project.

One assumption used to estimate the current travel planning economic contributions is that expenditure profiles should be matched with primary activity participation. Some have commented in the past that using total activity participation would change the results. This concern has been voiced by people who feel that if they were surveyed, they might not list their transportation mode of choice as their primary activity, but that due to this transportation preference, their expenditure profile means they contribute more to the local economy. After considering this concern it has been decided that the best way to handle this is to continue modeling based on primary participation with the caveat that this is the assumption used and may be a source of modeling error.

Also note that much of the money spent in the power sports industry on the goods and services, including welders, fabricators, paint shops, powder shops, and mechanics, as listed in a comment provided on the DEIS, falls into one of two categories that prevent it from being captured in the analysis. First, the money is spent on durable goods; these are goods that are used for more than one trip and/or in more than one location. Because it is theoretically incorrect to include durable goods as economic effects attributable to any single visit, expenditures on items that are used on multiple trips in multiple locations (e.g., hiking boots, snowmobiles) are not included in the estimates. The other category that much of the power sports expenditures fall into is for purchases of goods that have nonlocal production. The economic data used in the analysis estimates how much of the money collected locally funds local production, and therefore recirculates in the economy. When items purchased in connection with motorsports are produced outside the economic impact area, the result is that very little of the spending is captured locally and recirculated. For example, fuel is not produced in the impact area, so only a small portion of each dollar spent on fuel is retained locally, most is sent out of the economic impact area to purchase wholesale products.

Along the lines of data time lags, one significant limitation regarding the existing travel planning economic contributions and response coefficients, which are reported below, must be noted. Many comments have been received in response to scoping and on the DEIS noting that motorized use on National Forests has grown in recent years. To address this concern, the most recent participation rates have been pulled from the report of Round 2 (10/2006-9/2007) NVUM for the Bitterroot National Forest. However, the eight spending profiles and the proportions of user segments (local day, local overnight on forest, local overnight

off-forest, non-local day, non-local overnight on forest, non-local overnight off forest, and non-primary, as well as average visits per party trip) from Stynes and White (2005) are all based on Round 1 NVUM data.

3.4.2 REGULATORY FRAMEWORK

Executive Orders 11644 and 11989 apply to off-road use of motor vehicles on Federal lands.

Amendments to 36 CFR Parts 212, 251, 261, and 295 address travel management and designated routes and areas for motor vehicle use. The 2005 Travel Management Rule requires National Forests to designate those roads, trails and areas that are open to motor vehicle use. Once designation is complete for an administrative unit or a ranger district, motor vehicles will not be allowed off the designated system, with the exception for motorized wheeled access for dispersed camping. The rule requires each National Forest to provide for public participation in route and area designations. All relevant comments were considered in the development of this report.

The National Environmental Policy Act does not require a monetary benefit-cost analysis (40 CFR 1502.23), and given that most of the costs and benefits associated with travel management are either non-market in nature or highly dependent on analysis perspective, a Forest-specific cost-benefit analysis was not completed for Travel Management Planning Project.

3.4.3 AFFECTED ENVIRONMENT

A. Social Issues

This section addresses the social issues and the potential impacts to the social resource as a consequence of implementing any of the Travel Management Planning Project alternatives. The key social factors evaluated in this analysis include are lifestyles, land management perspectives, and recreation preferences. The combination of small towns and rural settings, along with people from a wide variety of backgrounds, provide a diverse social environment for the geographical region around the Darby, Stevensville, Sula, and West Fork Ranger Districts of the Bitterroot National Forest. Local residents pursue a wide variety of lifestyles, but many share a common theme: an orientation to the outdoors and natural resources. This is reflected in both vocational and recreational pursuits including employment in agricultural; logging and milling operations; outfitter and guide businesses; hiking; hunting; fishing; camping; skiing; snowmobiling; riding OHVs; and many other recreational activities.

Timber harvest and processing, log home building, tourism, and agricultural industries are important to the economy of the local areas. Despite the common concern for, and some dependence on natural resources within the local communities, social attitudes vary widely with respect to public land management. Local residents hold a broad spectrum of perspectives and preferences ranging from complete preservation to maximum development and recreational utilization of natural resources.

Travel management, planning, and route designation largely involve social issues. Travel planning involves a lot of consideration and a lot of discussion, due to compatible and/or competing uses and the needs to protect resources along with quality recreational experiences. Forest Service roads, trails, and areas provide opportunities for all types of activities: motorized and nonmotorized, summer use and oversnow vehicle use, etc., for local users and for non-local visitors. People may use the roads to drive toward the source of their employment (e.g., mining, forest management, outfitters and guides, and grazing). People may use the roads to access areas where they can go beyond motorized noises and recreate in quiet places. Others use the roads, trails, and areas to recreate and drive on with their motorcycles, ATVs, and snowmobiles. In addition, many people who visit the Bitterroot National Forest have special attachments to certain activities and to certain places. Consequently, limiting, changing and/or closing their type of access can produce strong reactions. Bitterroot National Forest personnel made great efforts to understand people's uses, motivations, and tolerance for change, and to consider these in travel planning and management.

People do not necessarily have to be active users of National Forest System roads and trails in order to hold values regarding access to the national forest, or to benefit from the existence (or non-existence) of the road and trail system. These "passive-use values" are values or benefits people receive from the existence of a specific place, condition, or thing – independent of any intention or expectation of them participating in active use of it. For example, some people believe that forest roads should be kept to a minimum because of negative ecological impacts that are sometimes associated with roads. Others believe that it is important to maintain large tracts of unroaded land in order to protect roadless and/or wilderness values, leaving a legacy of undeveloped land for future generations to experience. And, some people may not use the National Forest System roads and trails, but believe it is important to maintain that system for things such as timber harvest, mining, fire protection, and tourism.

The key economic factors evaluated in this analysis are population, employment, income, economic diversity, and natural resources dependency. The individual county EPS reports contain one additional year of data for several economic indicators, and so there is a mix of durations reported. The reader will note that sometimes the analysis period is 1990 to 2000 (10 years) sometimes it is 1970-2000 (30 years), sometimes it is 1970-2005 (35) years and sometimes it is from 1970-2006 (36) years.

B. Population

Perhaps the most important attribute of any economy is the community of people who contribute to production, services, trade, and consumption. The two counties in the economic impact area had similar population experiences since the 1970s, where both of the counties saw rapid population growth during the 36-year period from 1970 through 2007. Both impact area counties also experienced median age increases during the last decade.

Missoula County

From 1970 to 2006, the population of Missoula County increased by 45,596 people from 58,472 to 104,068, a 78 percent increase, with relatively constant growth, highlighted by two periods of rapid growth in the 1970s and 1990s. As an average annual rate, this represents an increase of 2.2 percent. Total population in year 2000 was 95,802 people, up 22 percent from 78,687 in 1990. The population also got older since 1990. The 2000 median age was 33.2 years, up from 31.7 years in 1990. During 2000, the largest age category was 20 to 24 years olds (10,773 people or 11.2 percent of the total). The age group that grew the fastest, as a share of the total, was 50 to 54 year olds, up 3,154 people; their share of the total rose by 2.6 percent during the decade. The 2000 population density in Missoula County was 37 people/square mile (BEA REIS 2006, Table CA30 and US Census 1990 and 2000). Population centers in this county include Bonner, Clinton, Condon, Evaro, Frenchtown, Lolo, Milltown, Missoula (county seat), Potomac, Seeley Lake, and Turah.

Ravalli County

From 1970 to 2006, the population of Ravalli County increased by 25,293 people from 14,543 to 39,836, a 174 percent increase, with relatively constant growth, highlighted by periods two periods of growth in the late 1970s and 1990s. As an average annual rate, this represents an increase of 4.8 percent. Total population in year 2000 was 36,070 people, up 44 percent from 25,010 in 1990. The population also got older since 1990. The 2000 median age was 41.1 years, up from 37.7 years in 1990. During 2000, the largest age category was 45 to 49 years olds (3,068 people or 8.5 percent of the total). The age group that grew the fastest, as a share of the total, was 50 to 54 year olds, up 1,405 people; their share of the total rose by 2.2 percent during the decade. The 2000 population density in Ravalli County was 15.1 people/square mile (BEA REIS 2006, Table CA30 and US Census 1990 and 2000). Population centers in this county include Conner, Corvallis, Darby, Florence, Hamilton, Pinesdale, Stevensville, Sula, and Victor.

Economic Impact Area

In aggregate, from 1970 to 2006, the population of these two counties increased by 70,889 people from 73,015 to 143,904, increasing by 97.1 percent, or nearly doubling in the 36 year period. The positive growth was rapid for the entire period except the 1980s. In sum, these two counties had a year 2000 population of 131,872. There were 28,175 additional residents or roughly 27.2 percent growth since 1990. The population the two-county area also got older since 1990, where the median age was up roughly 2.5 years, from 33 years in 1990 to 35.5 years in 2000. That year, the largest age category was 20 to 24 year olds (12,152 people or 9.2 percent of the total). The age group that grew the fastest, as a share of the total, was 50 to 54, up 4,559 people that decade; their share of the total rose by 2.5 percent. The 2000 population density in the five-county area was 26 people/square mile (BEA REIS 2006, Table CA30 and US Census 1990 and 2000).

C. Employment

Changes to access through travel management have the potential to slightly impact the existing configuration of employment across numerous economic sectors that support tourism and recreation in the two counties, which explains why the existing condition is reported here. Information available in EPS helps portray the recent employment situation in these counties, which serves as part of the backdrop for travel planning. Providing services employed the greatest portion (32.9 percent) of workers across the two-county area during year 2000. Collectively, transportation and public utilities, wholesale and retail trade, finance, insurance, and real estate and other services (health, legal, business and other) combined for 69.5 percent of all employment for the two counties during 2000. Government employment (13.3 percent) was also high across the economic impact area during 2000.

Missoula County

Over the period 1970 to 2006, roughly 52,193 new jobs were added in Missoula County. This represents 207.6 percent growth for the period, or an average annual increase of 5.8 percent. Job growth in Missoula County outpaced Montana and the nation for the period. The majority of job growth between 1970 and 2006, 74.5 percent of all new jobs, was wage and salary employment (people who work for someone else), however many new proprietors (self-employed people) also appeared. In 1970, proprietors represented 13.9 percent of total employment; this had changed significantly by 2006 when they represented 21.7 percent. For wage and salary employment, the category whose share of the total gained the most was Services and Professional, which went from 55.6 percent in 1970 to 72.2 percent in 2000. The sector that decreased the most was Manufacturing (including forest products) which fell from 14.4 percent during 1970 to only 5.6 percent during 2000. The portion of employment in government declined from 21.8 percent during 1970 to 13.7 percent during 2000. Farm employment also decreased from 1.2 percent of total in 1970 to 1.0 percent in 2000 (BEA REIS 2006).

Firms of various sizes operate in Missoula County. As a share of the total, the size category with the most firms between 1977 and 2005 had 1-4 employees. This was also the category that grew the fastest. In 2005, 88 percent of firms had fewer than 20 employees, although there were five firms with between 250 and 499 employees, five firms with 500-1000 employees, and two firms with more than 1,000 employees (Census County Business Patterns).

In 2007, the unemployment rate was 3.0 percent, compared to 3.1 percent for Montana and 4.6 percent nationally. In 2007, the monthly unemployment rate varied from a low of 2.4 percent in September to a high of 4.0 percent in January (Local Area Unemployment Statistics, Bureau of Labor Statistics), indicating nearly a doubling of the seasonal unemployment rate between fall and winter months.

Ravalli County

During the period 1970 to 2006, roughly 15,633 new jobs were added in Ravalli County. This represents growth of 316.6 percent for the period, or an average annual increase of 8.8 percent. Job growth in Ravalli

County outpaced Montana and the nation for the period. The majority of job growth between 1970 and 2006, 58.3 percent of all new jobs, was wage and salary employment. In 1970, proprietors represented 35.8 percent of total employment; this increased slightly by 2006 when they represented 40.3 percent. For wage and salary employment, the category whose share of the total gained the most was Services and Professional, which went from 44.3 percent in 1970 to 58.9 percent in 2000. The sector that decreased the most was government, which fell from 23.1 percent during 1970 to 11.7 percent during 2000. Farm employment also fell as a portion of total from 17.7 percent during 1970 to 7.9 percent during 2000. Despite adding 940 jobs during the 36 years, Manufacturing (including forest products) also declined slightly as a portion of total from 9.8 percent during 1970 to 8.4 percent during 2000 (BEA REIS 2006).

Firms of various sizes operate in Ravalli County. As a share of the total, the size category that with the most firms between 1977 and 2005 had 1-4 employees. The category that grew the fastest was firms with 10-19 employees. In 2005, 94 percent of firms had fewer than 20 employees, although there were six firms with between 100 and 249 employees and one with between 250 and 499 (Census County Business Patterns).

In 2007, the unemployment rate was 4.0 percent, compared to 3.1 percent for Montana and 4.6 percent nationally. In 2007, the monthly unemployment rate varied from a low of 3.0 percent in September to a high of 5.7 percent in January (Local Area Unemployment Statistics, Bureau of Labor Statistics), indicating nearly a doubling of the seasonal unemployment rate between fall and winter months.

Economic Impact Area

In aggregate, over the period 1970 to 2006, growth of 67,826 jobs occurred in the two county area, representing an increase of 225.5 percent or an average annual rate of 6.3. This was faster than the state and the nation. This is partially a function of the rapid population growth from 1970 to 2006. From 1970 to 2000, the majority of job growth, 72.6 percent of new jobs, was in wage and salary positions. For wage and salary employment, the category whose share of the total employment gained the most was Services and Professional, which went from 53.7 percent in 1970 to 69.5 percent in 2000. In 1970, proprietors represented 17.5 percent of total employment; by 2000, they represented 23.8 percent of all jobs (BEA REIS 2006). Government employment across the economic impact area declined as a portion of total from 22.1 percent during 1970 to 13.3 percent during 2000. Despite adding 1,048 jobs during the 36 years, manufacturing (including forest products) also declined as a portion of the total, from 13.6 percent (4,099 jobs) to 6.1 percent (5,147 jobs) during 2000. Farm employment decreased between 1970 and 2000, down from 3.9 percent to 2.4 percent.

Wage and salary employment contributed 74.8 percent of new employment between 1995 and 2005. The growth in both the number of operating firms by sector and the jobs by sector suggest that wage earners in the Services, Retail, and Construction sectors explain much of the job growth in the two-county area. Most firms operating in the two-county area are small in size. During 2005, the size category that had the greatest number of firms was 1-4 employees; this was also the category that grew the most between 1977 and 2005. In 2004, 90 percent of firms had fewer than 20 employees. The largest size firms in the two-county area had over 1,000 employees (Census County Business Patterns). More recent data shows that by 2007, total employment was 98,832 jobs, but it has since declined, and by 2010 there were 94,857 jobs in the economic impact area (BEA 2011).

In 2006, the unemployment rate was 3.1 percent, compared to 3.2 percent (state) and 4.6 percent (nationally) The monthly unemployment rate more than doubled from a low of 2.2 percent in September 2005 to a high of 4.7 percent in January 2006 (Local Area Unemployment Statistics, Bureau of Labor Statistics). This information for 2004 to 2006 shows a clear trend of a doubling of summer seasonal unemployment rate between fall and winter months, in the economic impact area. Like other parts of the country, the population in the economic impact area saw a large increase in the average annual unemployment rate. It climbed as high as 7.4 percent during 2010, and had fallen slightly to 7.2 percent by 2011 (BLS 2011).

D. Income

Total personal income and per capita personal income (PCPI) are often used to proxy standard of living. Not surprisingly, Missoula County, with a larger population, slightly outpaced more sparsely populated Ravalli County in personal income growth rate, and is currently about \$5,000 higher than Ravalli County in PCPI. Although PCPI for both counties was below the national average, this can be explained by the fact that non-metro PCPI is almost always lower than metro PCPI, and this higher income reflects the higher costs associated with living in metro areas which comprise a large portion of the national average. Both counties saw an increase in the portion of income from non-labor sources (dividends, interest, and rent as well as transfer payments from governments to individuals including Medicare, welfare, disability insurance payments, and retirements), which has increased by roughly 8-10 percent since 1970.

Missoula County

From 1970 to 2006, annual total personal income in Missoula County increased \$2,236 million in real (\$2006) terms, or roughly 47 percent. The average annual real growth rate was 1.3 percent. The income category whose share of the total gained the most was non-labor income, which went from 23 percent in 1970 to 32 percent in 2006. Between 1970 and 2006, non-labor income grew at an annual rate of 9.2 percent, outpacing labor sources which grew at a 5.0 percent rate. Of all the new income in 2006 compared to 1970, 36.1 percent was from non-labor sources. The labor income category whose share increased the most between 1970 and 2000 was Services and Professional, with 59 percent of new income. The sector where income fell the most as a portion of the total was manufacturing, which went from 16.2 percent in 1970 to 6.8 percent in 2000. Retail, Government, Transportation and Utilities, Construction, Wholesale, and Farming also lost shares of the total between 1970 and 2000. In 2006, welfare represented 8.0 percent of transfer payments and 1.1 percent of total personal income. This was up slightly from 1970 and up slightly from 1980 (BEA REIS 2006 Table CA35). Missoula County is an employment hub, where income derived from people commuting into the county to work exceeds the income from people commuting out of the county. The outflow of earnings earned in Missoula County to residents commuting from other counties represented 4.5 percent of total personal income.

Per capita personal income (PCPI), adjusted for inflation, rose from \$17,879 in 1970 to \$31,535 in 2006. After this 76.4 percent growth during the 36-year period, the 2006 PCPI in Missoula County (\$31,535) was higher than the state (\$30,790), but lower than the nation (\$36,714).

Average earnings per job, adjusted for inflation, fell from \$35,763 in 1970 to \$34,956 in 2006. In 2006, average earnings per job in Missoula County at \$34,956, were higher than the state (\$32,764) but significantly lower than the nation (\$47,286). During the 36-year period, total wage and salary disbursements grew at an average annual rate of 2.7 percent (adjusted for inflation), slower than the increase in total average non-farm proprietors' income, which increased by 3.5 percent per year. Of the categories that have data, the highest paying wage earning sectors were Federal government, Mining, Manufacturing (including forest products), and Agricultural, forestry, fishing, and hunting. These accounted for 3 percent, <1 percent, 5 percent, and 1 percent of total employment, and paid averages of \$59,519, \$49,758, \$41,636, and \$40,377, per year, respectively. Goods-producing jobs (6,315 jobs) were paid an average of \$38,164. Service-providing jobs (39,491 jobs) were paid an average of \$27,717.

Ravalli County

From 1970 to 2006, annual total personal income in Ravalli County increased \$834 million in real (\$2006) terms, or roughly 27.5 percent. The average annual real growth rate was 0.8 percent. The income category whose share of the total gained the most was non-labor income, which went from 37 percent in 1970 to 45 percent in 2006. Between 1970 and 2006, non-labor income grew at an annual rate of 13.1 percent, outpacing labor sources which grew at an 8.4 percent rate. Of all the new income in 2006 compared to 1970, 47.3 percent was from non-labor sources, and 52.7 percent came from labor sources. The labor income categories whose share increased the most between 1970 and 2000 were Services and Professional,

as well as Construction with 26 percent and 7 percent of new income, respectively. The sector where income fell the most as a portion of the total was Government, which went from 18.7 percent in 1970 to 10.1 percent in 2000. Retail, Transportation and Utilities, Manufacturing, and Farming also lost shares of the total between 1970 and 2000. In 2006, welfare represented 6.0 percent of transfer payments and 1.2 percent of total personal income. This was up slightly from 1970 and up slightly from 1980 (BEA REIS 2005 Table CA35). Ravalli County is a bedroom county, commuting mainly to Missoula County, where the amount of income derived from people commuting out of the county to work exceeds the income from people commuting into the county. The net inflow of earnings earned outside Ravalli County to residents commuting to other counties represented 11.5 percent of total personal income earned in the county.

Per capita personal income (PCPI), adjusted for inflation, rose from \$15,686 in 1970 to \$26,672 in 2006. After this 70 percent growth during the 36-year period, the 2006 PCPI in Ravalli County (\$26,672) was lower than the state (\$30,790), and the nation (\$36,714).

Average earnings per job, adjusted for inflation, increased from \$24,741 in 1970 to \$25,738 in 2006. In 2006, average earnings per job in Ravalli County at \$25,738, were lower than the state (\$32,764) and significantly lower than the nation (\$47,286). During the 36-year period, total wage and salary disbursements grew at an average annual rate of 3.7 percent (adjusted for inflation), slightly faster than the increase in non-farm proprietors' income, which grew by 3.0 percent per year. Of the categories that have data, the highest paying wage earning sectors were Federal government, State government, financial activities, Professional and business services, and Construction. These accounted for 4 percent, 1 percent, 9 percent, 4 percent, 10 percent, and 9 percent of total employment, and paid averages of \$53,012, \$38,491, \$33,630, \$31,461, \$30,230 and \$29,366 per year, respectively. Goods-producing employees (2,273 jobs) were paid an average of \$30,744. Service-providing employees (6,964 jobs) were paid an average of \$22,710.

Economic Impact Area

From 1970 to 2005, annual personal income for the economic impact area increased \$2.8 billion in real (\$2005) terms. The average annual real growth rate of 6.5 percent was faster than both the state and national rates. The income category whose share of the total gained the most was non-labor income, which went from 26 percent in 1970 to 34 percent in 2005, with even higher percentages than this between the early 1980s and the late 1990s. In those 35 years, non-labor sources grew at an average annual rate of 9.5 percent, outpacing labor sources which grew at a 5.5 percent rate. The labor income category whose share of the total decreased the most was manufacturing (including forest products), which went from 14.7 percent in 1970 to 6.7 percent in 2000. Of the new income in that period, 40 percent was from non-labor sources. In 2005, 57 percent of transfer payments were from age-related sources (retirement, disability, insurance payments, and Medicare). That year, welfare represented 8 percent of transfer payments and 1.2 percent of total personal income. This was up slightly from 1970 and up slightly from 1980 (BEA REIS 2005 Table CA35).

Per capita personal income (PCPI), adjusted for inflation, rose from \$16,897 in 1970 to \$28,942 in 2005. After this 71.3 percent growth during the 35-year period, the 2005 PCPI in the economic impact area (\$28,942) was lower than the state (\$29,015) and the nation (\$34,471).

Average earnings per job, adjusted for inflation, fell from \$33,368 in 1970 to \$32,610 in 2005. In 2005, average earnings per job in the economic impact area at \$32,610 were slightly higher than the state (\$32,258) but substantially lower than the nation (\$45,817). During the 35-year period, average wage and salary disbursements fell at an average annual rate of -0.21 percent (adjusted for inflation), whereas average non-farm proprietors' income fell annually by 1.0 percent.

In general, the economic impact area profiled in this analysis appears fairly healthy, with positive population growth during the last several decades, increases in employment and real personal income, and substantial increases in per capita personal income during the period from 1970 to 2005. Both counties

have winter unemployment rates roughly twice that of the annual low, occurring in September and October. Change is a constant in many geographic areas, especially those dependent on natural resources. Undulations in both the labor income and the growing portion of non-labor income may generate some instability for many of the economic indicators used to proxy economic well-being. The influence of the global economic recession will be difficult to predict and detect in some of these variables. Trends, like growth in service-sector employment and income found in these counties, are shared by most peer counties across the Rocky Mountain West. These growth trends are largely driven by population growth of both permanent and seasonal residents, and the changes in travel management in the Bitterroot Valley is unlikely to have a noticeable impact on these economic indicators.

Montag and Stockmann (2006) conducted a comprehensive analysis of the contribution that the Bitterroot National Forest makes to the economic impact area. They found that collectively, using a three year average from 2002-2004, all Forest Service programs and expenditures annually contributed roughly 1,306 part and full time jobs and \$39.3 million in labor income (\$2002) to the economic impact area. This represents 1.4 percent of total jobs and total labor income in the economic impact area. Please refer to Table 3.4-1 for additional information.

Table 3.4-1: Bitterroot National Forest Economic Contributions to Bitterroot National Forest Impact
Area

Bitterroot National Forest	Employment	Labor Income
Resource Programs	(Jobs)	(\$Thousands)
Recreation Management	307	6,842.299
Fish & Wildlife Management	86	1,938.564
Rangeland Management	4	50.567
Timber Management Mill Survey	278	6,674.443
Minerals Management	0	8.936
Payments to States/Counties	8	255.491
Forest Service Expenditures	622	23,514.008
Total Forest Management	1,306	\$39,284
Forest Total as a % of Total Area	1.37%	1.40%

E. Economic Diversity and Natural Resource Dependency

One measure of economic success and resilience is economic diversity, or the lack of overspecialization. Some communities that are heavily reliant on only a few industries are economically vulnerable to disruptions. The EPS Economic Diversity Index documents one measure of specialization based on employment data from the 2000 Census. For this index, the number of employees in each two-digit North American Industrial Classification System sector (e.g., manufacturing) are first divided by the total number of employees in the county. Then this same fraction for the national economy is subtracted, and the result is then squared for each given industry. The specialization score is the sum across all 2-digit sectors. This means that the more even the distribution of employees across all possible industries, the smaller the score; small scores imply greater diversity and large scores imply specialization.

Missoula County scored 85, and Ravalli County scored 80 (versus a United States median of 961 in a range of 0-3,441 for all 3,209 counties in the United States). Collectively, these two counties scored 72. The main reason Missoula County is more specialized than some peer counties is due to overspecialization in Educational services, Retail trade, and Accommodation and food services, whereas Ravalli County has overspecialization in the Agricultural, forestry, fishing and hunting services sector, and Construction. Missoula (7 percent) and Ravalli (9.3 percent) Counties are both under specialized in Manufacturing

(compared to 14.1 percent for the United States), and overspecialized in the Accommodation and food services sectors.

Wildland dependency data (Gebert and Odell 2006) for 2003, based on the percentage of total labor income (employee compensation and proprietor income) earned in five wildland resource areas (timber, mining, grazing, recreation and wildlife, and Federal wildland-related employment), is available in Table 3.4-2 for the two economic impact area counties. The portion of labor income earned in economic sectors associated with each resource area was calculated for 1993 and 2003, as was the change over the decade. Although these numbers cannot support thorough trend analysis, as they are only two snapshots in time, they do provide some important information.

Table 3.4- 2: Wildland Dependency by Resource for 2003 and Change between 1993 and 2003¹

County	Grazing	Timber	Mining	Federal Wildland	Recreation and	Primary	Indirect	Total
				Government	Wildlife			
Missoula	0.09	5.51	0.33	2.19	0.42	8.54	6.24	14.78
Change 1993-2003	-0.09	-4.37	0.22	-0.81	-0.45	-5.5	-2.04	-3.46
Ravalli	0.81	8.92	0.29	2.40	2.92	15.34	8.47	23.81
Change 1993-2003	-2.98	-2.04	0.08	-1.96	-2.72	-9.61	-4.62	-14.24

¹ Gebert and Odell, 2006

With the exception of mining, the labor income dependence fell for all wildland resource industries for both counties between 1993 and 2003. For example, Missoula County's dependence on timber industry fell substantially from 1993 to 2003. Ravalli County's timber dependence also decreased, but it still remained relatively high at 8.9 percent during 2003. Total labor income dependence for Missoula County fell by 3.5 percent to 14.8 percent by 2003. Ravalli County remained more dependent on wildland resource industry labor income, earning nearly 24 percent during 2003 after strong declines from nearly 40 percent dependency during 1993. Part of this dependence was tied to recreation and wildlife related labor income, which fell from 5.6 percent during 1993 to 2.9 percent during 2003.

F. The Western United States' OHV User Community

A recent report estimated that national participation rates in OHV activities may have peaked during 2003, and that United States residents over 16 years of age averaged roughly 28 days per year of motorized recreation between 2005 and 2007. In Montana, between 1999 and 2007, an estimated 28.7 percent of residents 16 years and older (the 95 percent confidence interval was 25.2-32.2 percent) participated in OHV recreation. This ranked Montana residents 6th among all states for the participation rate, and amounted to approximately 219,000 participants, who collectively represent roughly half of one percent of all US participants (Cordell et al 2008). Cordell et al. (2008) described some OHV user demographics by region:

"The West had the highest OHV participation rate (28%) of all the regions especially among young people where more than 40% under age 30 were OHV users. This was more than two-and-a-half times the rate of people over age 50 (15%). Males living in the West were more likely to participate just as in the other regions, but in this region, the female rate of 23% was considerably higher than the female rate in other regions. American Indians (32%) and Whites (31%) led participation among racial and ethnic groups, but Hispanics in the West (24%) participated at a much higher rate than Hispanics in the two eastern regions and also at a rate higher than the Midwest Hispanic rate. All but the lowest income category participated at 20% or higher. People in all income groups between \$25,000 and \$150,000 participated at more than a 30% rate. Similarly, all education classes, except post-graduates, participated at more than 25%. Still, post-graduates in the West participated at considerably higher rates than their counterparts elsewhere in the country. More than one in three non-metropolitan residents participated in OHV recreation as compared

with about one in four metropolitan residents saying they participated in OHV recreation" (Cordell et al. 2008, p. 29).

"Interestingly, the West, which led all regions with 28% of people 16 and older participating, had the next-to-smallest average annual days of OHV use with 23.2 days for participants, ahead of only the Pacific. Differences by age group were slight, but the highest average was for the 51 years and older age group. That was not true for either of the eastern regions or the Midwest. Male activity days were about six days higher than for females, however, data were not sufficient to estimate days by all income classes. High school graduates (26.1) and people with bachelor's degrees (23.7) led other educational attainment groups by a slender margin. Another interesting result for this region is the large difference in average days by non-metropolitan residents (35.3) compared to metropolitan dwellers (19.1). This is probably an indication of the convenient and ready-access to OHV opportunities on public land in the rural West" (Cordell et al. 2008, p. 36).

Cordell et al. (2008) also compared participation rates between OHV users and the general public based on responses to the National Survey on Recreation and the Environment (NSRE). They describe participation rates for each of the 47 outdoor recreation activities across five OHV user segments and the general public. What they found is that, "As a whole, OHV users are more active in every single recreation activity relative to the general U.S. population age 16 and older. For some activities, OHV users participate at more than twice the national rate. In particular, OHV users were about three times more likely to participate in the three types of hunting–big game, small game, and migratory bird–than was the general public" (Cordell et al. 2008, p.41).

G. Recreational National Forest Use, Social Issues, and Conflict

Social issues and impacts from management activities on National Forest System lands are often addressed according to the potential effects that Forest Service management may have on local, county, and regional social and economic systems, and also on the people using and valuing the resources and opportunities that the National Forests provide. People use the Bitterroot National Forest for a variety of reasons. Visits to the Forest have increased since the 2001 NVUM survey (see the NVUM section below). Strong preferences for specific recreation settings are leading to competition for the recreational resources available (English et al. 1999). The combination of increased use, diversified uses, and attachment to certain places combined with the need to provide for healthy and sustainable environments, along with limited road and trail maintenance budgets, makes for a challenging balancing act.

Social issues concerning travel planning on the Bitterroot National Forest have much to do with the variety of uses and allocations, and the values people hold toward those uses, allocations, and places and the potential conflicts between these uses and underlying values. People are concerned about the effects to wilderness characteristics, and also law enforcement, safety, and natural resource conditions (particularly in riparian areas). Some conflict does exist between different types of users, mainly between motorized versus nonmotorized, hunting and fishing versus non-consumptive uses, local recreational uses versus tourism, and resource preservation versus resource extraction.

Another issue raised by forest users locally and nationally is the concern that with an aging population, those roads should not be decommissioned so that they can be walked on and/or that motorized opportunities remain open for older and/or disabled persons to access. For the Bitterroot National Forest, the main issue concerns motorized and nonmotorized uses, and the conflicts which can and often do arise between these uses.

Motorized and nonmotorized use can be broken down into summer versus over-snow uses. Over-snow vehicle use primarily involves snowmobiles, while motorized summer use is generally done using motorcycles, ATVs, and full-size vehicles and driving on system roads. Nonmotorized over-snow use primarily involves cross-country skiing, backcountry skiing, and some snowshoeing, and nonmotorized summer use runs the gamut of recreational opportunities, especially hiking, backpacking, bicycling, and

horseback riding. Fishing, viewing wildlife and hunting are done as both motorized and nonmotorized activities.

The conflict between motorized and nonmotorized use is somewhat self-explanatory: motorized users (including snowmobiles, ATVs, and motorcycles) like to travel the land on their motorized vehicles. Nonmotorized users (including hikers, bicyclists, backpackers, wildlife viewers, stock users, and crosscountry skiers) value the "natural experience," one which does not include noise and the intrusion of machines. Both groups tend to value their uses for similar reasons, and often desire the same types of settings and experiences. People like to use the forest with their friends and family; they appreciate activities out-of-doors; they appreciate the beauty of the area; the challenges presented. Both groups usually seek destinations, scenery, loop trails, and/or roads.

One of the issues raised through comments during travel planning is the economic contributions (i.e., economic impacts) of motorized and nonmotorized uses. Various sources of information are used to display use and trends in motorized and nonmotorized use in Montana and on the Bitterroot National Forest. Vehicle registration data from the Montana Department of Justice, Motor Vehicle Registration Bureau was used to understand the state-wide trend in snowmobiles, ATVs, and motorcycles (MT Dept. of Justice, 2005). Results from a statistically rigorous sampling regime used by the Forest Service National Visitor Use Monitoring survey (NVUM) are displayed to describe total forest-level use (visits) and use by various motorized and non-motorized activities.

Montana Trends in Motorized Use

Figure 3.4-2 shows the trend in the number of registered ATVs, snowmobiles, and motorcycles (street and dirt bikes) in Montana for the period 1992-2004 (MT Dept. of Justice 2005). Figure 3.4-3 shows more recent data for the economic impact area (EIA), consisting of Missoula and Ravalli Counties, Montana (MT Dept. of Justice 2012). This information is useful in gauging the popularity of outdoor activities that use this equipment since trend information is difficult to obtain for these types of dispersed activities. In general, the data indicate an upward trend in ownership in Montana. The average annual growth rates for ATVs, snowmobiles, and all motorcycles from 1992-2004 were 9.7 percent, 5.4 percent, and 7.3 percent, respectively. This compares to an average annual population growth rate in Montana of approximately 1 percent (but roughly 6.3 percent average annual population growth in the economic impact area) during this time period. The registration growth trend continued during 2005 and 2006 for both OHVs and snowmobiles according to recent data from the Montana Department of Justice Title and Registration Bureau. The growth rate in registration far exceeded the state population growth rate, and was in step with the economic impact area population growth rate, indicating that either those activities that use this motorized equipment are gaining popularity and/or compliance with registration requirements has increased. During 2008, the latest year obtainable, roughly 15 percent of all Montana motorcycle and snowmobile registrations where in the two-county EIA, whereas 11 percent of all Montana OHV registration were in the EIA

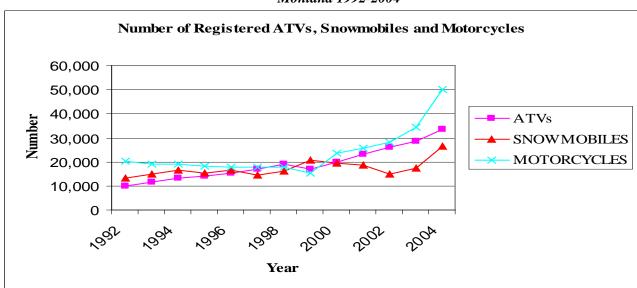
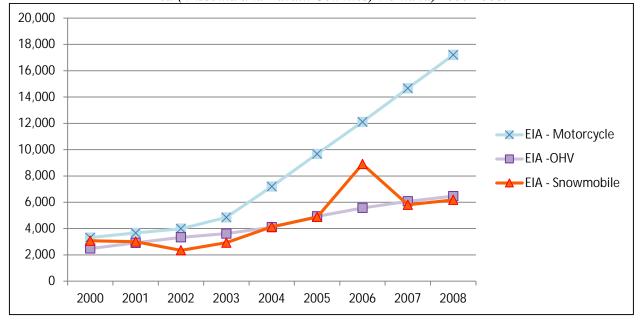


Figure 3.4- 2: Registered All-Terrain Vehicles (ATVs), Snowmobiles, and Motorcycles in Montana 1992-2004

Figure 3.4- 3: Registered Motorcycles, Off Highway Vehicles, and Snowmobiles in the Economic Impact Area (Missoula and Ravalli Counties, Montana) 2000-2008.



The Bureau of Business and Economic Research (BBER) conducted a statewide analysis of OHV use and economic impacts for Montana Fish Wildlife & Parks based on a 2007 survey. This is what BBER (Sylvester 2009) found:

- Ø OHV owning households own an average of two machines and two family members usually participate in outings.
- Ø Residents spend nearly all of their out-of-pocket trip costs for gasoline. We estimate that OHVers buy about 5.3 million gallons of gasoline per year. With a base tax of \$0.27 per gallon, we estimate that OHVers in Montana generate over \$1.4 million in revenue for the state highway trust fund.

- Ø Other assumptions pertained to data analysis of impacts generated by resident OHVers only. Based on interviews with Montana OHVers, residents travel between 15 and 20 miles per activity day on their OHVs, and spend about \$21 for OHV fuel per activity day.
- Ø OHV riding is a dispersed outdoor activity, so precise counts are virtually impossible; however, we derive an estimate using survey data. Using the number of OHVs and the average number of days the typical participant uses their machine, we estimate the number of activity days for resident OHV use is between 1 and 1.5 million days.
- Ø The Institute for Travel and Tourism (ITRR) estimates that about 2.7 percent of nonresidents participate in OHV activities. This translates in to about 277,500 individuals. A conservative estimate of nonresident activity days is 300,000.
- Ø The BBER survey of resident expenditures suggests that residents typically don't incur lodging costs and spend little on eating and drinking, and other expenses. A majority of residents don't make expenditures in most of the spending categories. Resident's median expenditures were about \$41 per day, all on gasoline for machines and transportation.
- Ø Even though resident OHVers are not considered part of the economic base, residents spend substantial money to OHV in Montana. Table 2 summarizes resident's annual expenditures. Residents spend about 43 million dollars on trip expenditures nearly all for gasoline and another 80 million dollars on yearly expenses. Over three-quarters of yearly expenditures are spent on OHVs and trailers.
- Ø Southwestern Montana is the hub of OHV activity in Montana, from a participant standpoint as well as a destination.

Their survey also offered an opportunity for respondents to comment on what they thought was the most important issue facing off-highway vehicle recreation. All the comments solicited can be found in Appendix 1. Access to trails was the most frequently cited issue. Sixty percent mentioned access issues. About 23 percent of residents mentioned safety, particularly personal responsibility. Many of the personal responsibility comments reflected a view that the activities of a few were ruining riding opportunities:

- Ø "A lot of trails have been closing. Few people who don't follow rules ruin it for rest."
- Ø "Off-highway vehicle users who go off trails to get them shut down."
- Ø "Drivers staying on the trails. Young people are riding everywhere, they're going to close it because of it."

(Extracted from Sylvester 2009)

National Visitor Use Monitoring

The National Survey on Recreation and the Environment research described above estimates recreation occurring statewide on all land ownerships. Another statistically-valid recreation study, National Visitor Use Monitoring (NVUM), conducted by the Forest Service estimated participation rates and spending for various activities specifically on the Bitterroot National Forest.

The NVUM survey was implemented to better understand recreation use occurring on National Forest System lands (Kocis et al. 2003). From October 2006 through September 2007, the Bitterroot National Forest participated in the NVUM survey process. Examples of information provided in the more recent Bitterroot National Forest report (USDA Forest Service 2009) include: 1) total number of visits; 2) overall and primary participation rates; and 3) user satisfaction. The survey also collected information regarding user party spending within 50 miles of the National Forest boundary. Users reported expenditures for various spending categories, such as groceries, restaurants, gas/oil, and lodging. The specific spending profiles and expenditures used in this analysis are from Round 1 NVUM, and are found in Stynes and White (2005).

The NVUM results indicate that 893,600 total site visits and 824,100 primary visits (the 90 percent confidence interval for primary visits ranges from 783,800 to 864,400) occurred on the Bitterroot National

Forest during the FY 2007 survey period. This point estimate of primary visits is up 112,200 from 711,900 for FY 2001. Table 3.4-3 presents participation rates by activity for the most recent monitoring period. The column titled **Total Activity Participation** % presents the participation rates by activity. Participation rates will exceed 100 percent since visitors can participate in multiple activities. Viewing natural features (78.3 percent) hiking and walking (66.4 percent), viewing wildlife (58.3 percent), and driving for pleasure (29.7 percent) led all activities in percent participation. Some of these users can occasionally conflict with each other. For instance, hikers may prefer not to hear the noises associated with motorized vehicles, and horseback riders can have conflict with hikers, dogs, and motorized vehicles.

The **Percent as Main Activity** column presents the participation rates in terms of visitors' self-selected primary activity. The column indicates that the five most popular non-wildlife related primary activities were: 1) hiking / walking (36.4 percent); 2) snowmobiling (7.6 percent); 3) horseback riding (6.6 percent); 4) viewing natural features (6.5 percent); and, 5) driving for pleasure (6.3 percent).

The primary activity participation rates (**Percent as Main Activity**) were used to estimate use by activity. For this analysis, motorized and nonmotorized use were defined as follows: 1) **motorized** = OHV use (which includes motorized trail activity), snowmobiling, driving for pleasure, motorized water activities, and other motorized activities, and 2) **nonmotorized** = backpacking, hiking / walking, horseback riding, bicycling, cross-country skiing, and other non-motorized activities. Table 3.4-3 indicates that, as aggregates, visitors listing motorized use as the primary activity represented 16.5 percent of the visiting population, while visitors listing non-motorized use as the main activity represented 49.3 percent of the visiting population.

Table 3.4- 3: Bitterroot National Forest Activity Participation and Primary Activity

Activity	Activity Emphasis for		Percent as Main
	Road & Trail Use	Participation (%) ^{1/2}	Activity (%) ^{3/4}
Snowmobiling	Motorized	7.6	7.6
Driving for Pleasure	Motorized	29.7	6.3
OHV Use/Motorized Trail Activity ⁵	Motorized	6.3	2.6
Other Motorized Activity	Motorized	0.1	0.0
		Motorized Subtotal	16.5
Hiking / Walking	Nonmotorized	66.4	36.4
Bicycling	Nonmotorized	2.6	2.0
Other Nonmotorized	Nonmotorized	1.7	0.9
Cross-country Skiing	Nonmotorized	0.9	0.0
Backpacking	Nonmotorized	4.6	3.4
Horseback Riding	Nonmotorized	7.5	6.6
		Nonmotorized Subtotal	49.3
Downhill Skiing	Other	0.1	0.1
Fishing	Other	6.4	1.7
Viewing Natural Features	Other	73.8	
Relaxing	Other	60.0	4.2
Motorized Water Activities	Other	0.5	0.3
Hunting	Other	10.2	10.2
Nonmotorized Water	Other	1.1	0.1
Developed Camping	Other	6.8	4.0
Primitive Camping	Other	0.6	0.0
Picnicking	Other	7.2	1.1
Viewing Wildlife	Other	58.3	3.4
Sightseeing	Other	0.0	0.0
No Activity Reported	Other	0.2	0.2
Resort Use	Other	1.3	0.4
Visiting Historic Sites	Other	3.9	0.0
Nature Study	Other	6.1	0.0

Activity	Activity Emphasis for	Total Activity	Percent as Main
	Road & Trail Use	Participation (%) ^{1/2}	Activity (%) ^{3/4}
Gathering Forest Products	Other	6.2	2.5
Nature Center Activities	Other	0.6	0.0
		Other Subtotal	34.7
		Total	100.5

¹ Survey respondents could select multiple activities so this column may total more than 100 percent

Travel Management Economic Contribution Analysis

Based on the NVUM, users were determined to be either local or non-local based on the miles from the user's residence to the Forest boundary. If the user reported living within 50 miles of the boundary, they are considered local; if over 50 miles, they are considered non-local. The majority of Bitterroot National Forest visitors were local (88.5 percent) with fewer non-local visitors (9.9 percent), and a small percentage of non-primary users (1.7 percent). This pattern, where the majority of visitors are local, is consistent with many other national forests.

Based on economic surveys conducted as part of NVUM, visitors to the Bitterroot National Forest are considered low spending visitors compared to peers at all National Forests across the country. Table 3.4-4 indicates the number of visits and the expenditures (\$ per visit) for the different motorized and nonmotorized activities occurring on the Bitterroot National Forest. Each activity group has a unique number of visits per party trip. Of the nonmotorized activities, cross-country skier parties spend the most per visit (ranging from \$15 for local day users to \$120 for non-local overnight users). However, the use data indicates that very little cross country skiing occurs on the Bitterroot National Forest. The majority of nonmotorized use is for hiking/walking by both local and non-local visitors.

From the standpoint of motorized activities, snowmobilers spend the most per visit (ranging from \$30 for local day users to \$129 for non-local overnight users) the use data also indicates the 7.6 percent of primary Bitterroot National Forest visits are from snowmobilers. Driving for pleasure, with 6.3 percent of primary visits, is the motorized activity associated with the greatest number of summer visits.

Table 3.4- 4: Number of Party Trips and Expenditures by Activity Type

Activity	Use (Party Tr	Use (Party Trips) ¹		(2008\$ per Visit) ²	
Nonmotorized	Local	Non-local	Local Day (Overnight)	Non-local Day (Overnight)	
Horseback Riding ³	20,418	6,062	11 (40)	18 (107)	
Backpacking ³	5,469	5,040	NA (36)	NA (40)	
Hiking / Walking ³	112,608	33,433	11 (40)	18 (107)	
Bicycling ³	6,187	1,837	11 (40)	18 (107)	
Cross-country Skiing	0	0	15 (87)	19 (120)	
Other nonmotorized ³	2,784	826	11 (40)	18 (107)	
Motorized					
OHV	6,609	3,078	19 (49)	29 (65)	
Driving for Pleasure ⁴	21,081	3,264	13 (43)	18 (67)	
Snowmobiling	18,338	5,224	30 (69)	49 (129)	
Other Motorized ⁴	0	0	13 (43)	18 (67)	

¹ Bitterroot National Forest, National Visitor Use Monitoring Results for FY2007, Dated January 2009

² The number in this column is the percent of survey respondents who indicated participation in this activity

³ Survey respondents were asked to select just one of their activities as their main reason for the forest visit. Some respondents selected more than one, so this column may total more than 100 percent

⁴ The number in this column is the percent of survey respondents who indicated this activity was their main activity

⁵ The 2007/2008 percentages for the "motorized trail activity" category were added to OHV use for this analysis

Table 3.4-5 displays the estimated employment and labor income contributions for all recreation visitation (i.e. wildlife and non-wildlife visitation) to the Bitterroot National Forest. There were a total of 824,100 primary visits to the Bitterroot National Forest during the FY 2007 sampling period (**Note**: The number of primary visits is slightly less than the total visits reported in the NVUM report). Non-primary visitation to the Bitterroot National Forest was eliminated from the economic effects analysis since these users were not coming primarily to recreate on the Forest. Approximately 10 percent of the primary visits to the Forest were attributable to non-local users. The 2001 Bitterroot NVUM data describing party sizes, expenditure profiles, and segment portions (local day use, local overnight, non-local day use, non-local overnight) were the most recent available. So these estimates, and the 2006 expenditure profiles, were applied with the more recent 2007-2008 participation data to estimate the current economic contributions.

The results indicate that there were roughly 300 total jobs (including direct plus indirect and induced (a.k.a multiplier jobs)), and \$6.8 million of total labor income ((direct plus indirect and induced (a.k.a. multiplier labor income)) attributable to the total non-wildlife and wildlife recreation that year. Of this there were roughly 133 total jobs (direct plus multiplier effect) and \$3.22 million of total labor income (direct plus multiplier effect) attributable to local visitation. There were also approximately 166 total jobs (direct plus multiplier effect) and \$3.66 million of total labor income (direct plus multiplier effect) attributable to non-local recreation users.

Table 3.4- 5: Estimated Employment and Labor Income Effects for All Current Recreation Use Reported by NVUM

Economic Effects Based on Local Use (727,680 visits)					
	Direct Effects	Indirect & Induced Effects	Total Effects ²		
Jobs	98	37	133		
Labor Income (M \$) ¹	2,209.3	1,010.6	3,219.9		
Economic E	affects Based on No	on-local Use (96,420 v	visits)		
	Direct Effects	Indirect & Induced Effects	Total Effects ²		
Jobs	124	42	166		
Labor Income (M \$)	2,533.8	1,123.6	3,657.4		

¹ Labor Income is reported in \$2008

In the two county economic impact area, the total employment in 2006 was 99,777 jobs with \$4.228 billion dollars in labor income (IMPLAN 2006). All employment and labor income attributable to recreation activities on the Bitterroot National Forest accounted for 0.31 percent of the total employment and 0.21 percent of total labor income in the economic impact area.

Motorized and Nonmotorized Use

Table 3.4-6 displays the estimated employment and labor income effects for current use levels reported by NVUM for local and non-local motorized and nonmotorized activities. In general, the estimated economic effects are a function of the number of visits and the dollars spent by the visitors. For example, non-local users typically spend more money per visit than local users. Also, activities that draw more users will be responsible for more economic activity in comparison to activities that draw fewer users, holding constant spending per visit. Given that this analysis is dependent on visitation and expenditure estimates, any changes to these estimates affect the estimated jobs and labor income.

² Stynes D.J. and E.M. White. 2005. Spending Profiles for National Forest Recreation Visitors by Activity

³ These activities share the same spending profile

⁴ These activities share the same spending profile

² Totals reflect decimals rounded in this table

Table 3.4-6 indicates that approximately 131 total jobs (direct, indirect, and induced) and \$2.89 million in total labor income was attributable to nonmotorized activities on the Bitterroot National Forest, with about 72 percent due to local users and 28 percent to non-local users. The vast majority (72.6 percent) of all nonmotorized jobs and income were associated with hiking/walking.

Motorized activities were responsible for approximately 53 total jobs (direct, indirect, and induced) and \$1.17 million in total labor income (direct, indirect, and induced), with 57 percent of these jobs and income associated with non-local use. Of this, snowmobile use on the Forest accounted for approximately 34 total jobs (64 percent of the motorized total) and \$750,507 in total labor income (64 percent of the motorized total). Driving for pleasure on the Bitterroot National Forest accounted for approximately 11 total jobs (20 percent of the motorized total) and \$240,500 in total labor income (20 percent of the motorized total). Off-highway vehicle use combined with motorized trail activity on the Bitterroot National Forest accounted for approximately 8 total jobs (15 percent of the motorized total) and \$192,700 in total labor income (16 percent of the motorized total).

Together, this subset of all activities grouped as either motorized or nonmotorized accounted for approximately 61.4 percent of the jobs and income associated with all recreational activity on the Bitterroot National Forest, with nonmotorized activities accounting for around 43.7 percent and motorized activities accounting for 17.7 percent.

Table 3.4- 6: Employment and Labor Income Contributions by Activity Type¹

Tuote 3.4- 0. Employment	Employment Effects			
	(full	& part-time jobs)	Labor Incom	e Effects (\$) ²
Nonmotorized Use	Direct	Indirect & Induced	Direct	Indirect & Induced
Local Horseback Riding	4.8	1.8	107,194	46,803
Non-local Horseback Riding	8.1	2.6	154,590	70,072
Local Backpacking	3.9	1.5	87,047	41,047
Non-local Backpacking	4.3	1.5	90,845	40,030
Local Hiking / Walking	26.7	9.8	591,193	258,125
Non-local Hiking / Walking	44.5	14.2	852,587	386,457
Local Bicycling	1.5	0.5	32,483	14,183
Non-local Bicycling	2.4	0.8	46,845	21,234
Local Cross-country Skiing	0.0	0.0	0.0	0.0
Non-local Cross-country Skiing	0.0	0.0	0.0	0.0
Local Other Nonmotorized	0.7	0.2	14,617	6,382
Non-local Other Nonmotorized	0.8	0.3	13,763.9	7,038.8
Total	98.0	33.2	\$1,998,482	\$893,888
Motorized Use				
Local OHV	3.2	1.2	71,086	30,492
Non-local OHV	2.9	1.0	63,187	27,935
Local Driving for Pleasure	5.0	1.7	106,279	44,257
Non-local Driving for Pleasure	3.3	1.0	61,524	28,440
Local Snowmobiling	14.1	4.8	310,304	128,786
Non-local Snowmobiling	11.2	3.6	212,073	99,344
Local Other Motorized Act.	0.0	0.0	0.0	0.0
Non-local Other Motorized Act.	0.0	0.0	0.0	0.0
Total	39.8	13.4	\$815,454	\$359,254

¹ Stynes, D. J, and E.M. White. 2005. Spending Profiles for National Forest Recreation Visitors by Activity ² Dollars are for 2008

H. Bitterroot National Forest Budget Trend

Several comments were received on the DEIS concerning the costs and affordability of various alternatives. Table 3.4-7 displays the budget for the Bitterroot National Forest from 2003 through 2013. The budget consists of all line-items available to fund activities on the Forest. The data indicates that the budget decline from 2003 to 2004 and beyond has been very steep; the inflation adjusted budget has declined by approximately 62 percent between 2003 and 2013. This budget decline restricts the Forest's use of appropriated funds to accomplish needed work on the Forest. Forest stewardship contracting, a toolkit frequently applied on the Bitterroot, allows the Forest to retain receipts from revenues generated by vegetation projects. The retained receipts can be used for vegetation management treatments and required design criteria and other non-timber activities such as road and trail work.

Table 3.4-7: Total Bitterroot National Forest Budget in Non-inflation Adjusted and Real (inflation
adjusted) Dollars by Year

Year	Non-Inflation Adjusted Budget	Budget (\$2013)
2003	\$20,992,239	\$25,824,472
2004	\$13,989,504	\$16,727,560
2005	\$15,168,331	\$17,555,892
2006	\$11,669,107	\$13,101,620
2007	\$11,746,577	\$12,879,228
2008	\$12,616,560	\$13,544,131
2009	\$14,974,979	\$16,033,611
2010	\$14,462,123	\$15,046,275
2011	\$10,880,600	\$11,213,299
2012	\$10,213,000	\$10,355,144
2013	\$9,759,200	\$9,759,200

Funding for Trail Operation, Maintenance, and Improvements

Forest Service funding for trail operation, maintenance, and improvements is authorized and appropriated by Congress, and fluctuates from year to year. Funding for trail maintenance, improvements and special projects, such as funding after fires or wind/flood events, mainly come to the Bitterroot National Forest through a variety of funding codes known as budget line items, (BLIs) that change through the years. There is a specific BLI that is intended for trail improvement or operations and maintenance: CMTL. The regional allocation for CMTL is based upon a forest's total miles of trails; the Bitterroot National Forest has about 5.4 percent of the total trail miles in Region 1, and correspondingly receives that portion of the total budget. Of that portion, approximately 60 percent of a Forest's funding will go to operations and maintenance, and 40 percent to Capital Investment Projects (CIP) that the unit has identified and prioritized.

There are also special BLIs that Regions and Forests compete for annually at the national or regional levels, as well as some miscellaneous funding through project implementation or funding focused for specific trails such as the Continental Divide National Scenic Trail, the Nez Perce National Historic Trail, and the Lewis and Clark National Historic Trail. The Bitterroot National Forest contains portions of all three trails, and typically receives funding annually to maintain those trails. Also, depending on National Emphasis Items, or special funding due to extensive wildfires or flooding, additional funding has been received from the following sources: Blowdown funding; Burned Area Emergency Response (BAER); Trail, Flood Damage Repair (CMEST, Disaster Recovery); Trail Rehabilitation and Restoration (WFW3); Legacy Roads and Trails (CMLG), American Recovery and Reinvestment Act (ARRA -received in 2010); Post Fire Rehabilitation and Restoration (NFN3); and Collaborative Forest Landscape Restoration Program (CFLRP - received in 2011). Funding from these sources can come to the Forest as CMTL, but is considered over and above the allocated amount from the region. Depending on the program of work and

what is realistic to accomplish with crews on the ground, this funding can be put into agreements and used over multiple years. National Emphasis Items funding varies from year to year, and is not guaranteed. In addition, the Bitterroot National Forest trails program has been successful throughout the years in receiving grant funding from Montana Fish, Wildlife & Parks and Title III of the Secure Rural Schools and Community Self Determination Act through the Ravalli Resource Advisory Committee. Collectively, all of these types of BLIs and grants fund trail improvements, operations, and maintenance tasks or special projects associated with the Forest's Trail System.

The following table, Table 3.4-8, shows funding in CMTL, as well as the additional funding received from other BLIs, grants, or special projects from 2007-2013:

Annual Funding	FY 2007	FY 2008	FY 2009	FY 2010 ¹	FY 2011 ¹	FY 2012	FY 2013
Investments (CIP)	\$166,286	\$186,000	\$183,000	\$183,000	\$170,000	\$161,000	\$139,000
Operations and Maintenance	\$224,174	\$267,000	\$320,000	\$295,000	\$342,000	\$318,000	\$242,000
Additional Funding	\$66,147	\$169,320	\$128,120	\$487,051	\$237,813	\$186,823	\$217,212
Total trails funding to the Bitterroot National Forest	\$456,607	\$622,320	\$606,120	\$965,051	\$749,813	\$655,823	\$598,212

Table 3.4- 8: Bitterroot National Forest Trails System Funding 2007-2013

Currently, annual budgets supporting trail maintenance work are insufficient to maintain all the miles of the Forest's trail system to standard, so prioritizing the work and adjusting that list annually is necessary as budgets, health and safety issues, and resource concerns change.

Funding for Road Maintenance and Improvements

Forest Service funding for road maintenance and improvements is authorized and appropriated by Congress, and fluctuates from year to year. The Forest Service is committed to using whatever funds it has available to accomplish implementation of the 2005 Travel Management Rule in a targeted, efficient manner. Funding for road maintenance, improvements, and special projects mainly come to the Forest through a variety of funding codes known as budget line items (BLIs) that change through the years. There are specific BLIs, CMRD and CMLG, that are intended for road improvements or operations and maintenance. There are also special BLIs, such as NFRR, that Regions and Forests compete for annually at the national or regional levels, as well as some miscellaneous funding through project implementation. Collectively, these types of BLIs fund road improvements, operations and maintenance tasks, or special projects associated with the Forest's Transportation System.

The Forest's funding comes from the Region 1 office. Factors considered when allocating funds include the board footage to be cut in timber sales, the acres to be treated for fuels reduction, the annual recreation visitor days on the Forest, and the acres of land suitable for road access. Acres of suitable land for road access are identified in the 1987 Bitterroot National Forest Plan. It is important to note that the miles of road are not considered in the allocation of funding.

The investment portion of Capital Improvement and Maintenance – Roads (CMRD) funds road improvement projects, architectural and engineering design of aquatic organism passage (AOP) culverts and bridges, culvert and bridge construction, road storage projects, and trailhead improvement projects, as well as salaries and fleet expenses to administer the work; it is essentially investment in any project or design that improves a piece of infrastructure from its original standard. For roads, this could be gravel surfacing; for streams this may be AOP structure installation or bridge construction.

¹Unusually high budgets due to ARRA and CFLRP

The CMRD operation and maintenance funding covers salaries and fleet costs, road improvement projects, road maintenance projects, annual consumables, road maintenance contracts and contract modifications, or other projects associated with management of the road system. CMRD also assists in funding salaries for NEPA planning efforts, road storage and, if specifically mandated by Congress, road decommissioning projects.

Capital Maintenance Legacy Roads and Trails (CMLG) is another BLI intended for use in transportation system management; it is used for road improvements, operations and maintenance, and special projects.

Another BLI associated with the Forest Transportation System is National Forest Resource Restoration (NFRR); funding under this BLI began in 2012, and is the latest BLI in which forests compete nationally for project dollars. The funds associated with this BLI are intended to improve watershed conditions nationally; however the funds may be used for a variety of projects. Many of those projects involve the road system, or impacts of the road system on water resources. In FY 2012, NFRR funded design of an erosion control project on the Selway River, contract administration of AOP structures being designed and built, road decommissioning projects, and a NEPA planning effort.

Additionally, other sources of funding may come to the Forest as project dollars to be spent on the road system as investments, operations, and maintenance, or special projects, as shown over the past 7 years. Some of these funding codes were used to address one-time occurrences; others were used to mitigate impacts of the road system, while others were associated with road management, but were not annual in nature. Tables 3.1-11 to 3.1-14 in the Transportation analysis in the FEIS (Chapter 3, Section 3.1) provide more detailed information for all these road maintenance funding sources. Table 3.1-15 in the Transportation analysis, replicated here as Table 3.4-9, and shows the total funding from all sources for the road system received by the Forest for the fiscal years 2007-2013:

Funding Source	FY 2007	FY 2008	FY 2009 ¹	FY 2010 ¹	FY 2011	FY 2012	FY 2013
CMRD	\$743,000	\$967,000	\$609,000	\$1,060,000	\$524,000	\$511,000	\$472,023
CMLG	NA	\$535,000	\$311,00	\$484,000	\$521,000	\$0	\$0
NFRR	NA	NA	NA	NA	NA	\$185,000	\$164,928
Miscellaneous	\$147,000	\$603,000	\$5,380,000	\$2,351,000	\$100,000	\$153,000	\$82,228
Total to the							
Bitterroot							
National							
Forest	\$890,000	\$2,105,000	\$6,300,000	\$3,895,000	\$1,145,000	\$849,000	\$719,179

Table 3.4- 9: Bitterroot National Forest Road System Funding 2007-2013

Based on the prioritization methodology used by the Bitterroot National Forest, funding for where road maintenance and improvements is spent is continually changing. Those roads impacting resources migrate to the top of the priority list, and receive the treatments needed to mitigate resources impacts. Then they are monitored and maintained over the long-term. Roads located near streams and rivers will generally receive more maintenance, improvements, and monitoring than those traversing drainages at higher elevations. Road maintenance priorities on the Forest are dynamic and evaluated annually.

3.4.4 ECONOMIC CONSEQUENCES

A. National Travel Management Rule Benefit Cost Analysis

When the 2005 Travel Management Rule was developed, the Forest Service considered the consequences in a qualitative cost benefit analysis. The following text and Table 3.4-10 are extracted from that analysis.

¹ Unusually high budgets as part of the American Recovery and Reinvestment Act of 2009

"The benefits and costs of the final rule are described qualitatively because the rule is procedural. Actual transportation decisions will be made at the local level with public input and appropriate environmental analysis and documentation. Neither the costs nor benefits are readily quantifiable, and thus this analysis discusses the costs and benefits to the extent information is available [Table 3.4-10]. The benefits of the final rule include gains to users, the agency, and the environment. Sustainable, reliable, high-quality public access to National Forest System lands will lead to enhanced recreation opportunities for visitors. In addition, both users and the agency will benefit from improved public communication, more effective law enforcement, and improved travel management planning. Other benefits include reduced environmental damage and a more consistent and defensible travel planning framework. The costs of the final rule include reductions in unconstrained cross-country motor vehicle use for those that value this activity, and short-term agency planning costs as many National Forests launch travel planning efforts following adoption of the rule." {Project File folder 'economic_social,' Project File document ECONOMIC-005.pdf}.

Table 3.4- 10: Costs and Benefits of Final Travel Management Rule

	1	is of Final Travel Management Rule
Potential	Current Rule	Final Rule
Impacts		
Public Communication	User confusion from inconsistent policy among national forests. Lack of compliance due to uncertainty and inconsistency of policy.	Increased user benefits and decreased agency management costs due to increased public involvement, user awareness, and cooperation with user groups, access, and route management.
Public Safety	Unmanaged user-created routes have potential safety issues. Law enforcement effectiveness limited by inconsistent regulatory framework.	Increased public safety due to better trail design and management Increased law enforcement effectiveness and increased user benefits due to consistent regulatory framework
Travel System Maintenance and Management	Many unmanaged, unmaintained routes result in deterioration of routes and environmental impacts.	Decreased loss of environmental benefits result from a sustainable system of managed, maintained and enforced routes
Short Run Planning Costs	Increased agency planning costs as National Forests take on travel management issues individually without consistent framework.	Increased agency planning costs because many National Forests will launch travel planning
Long Run Planning Costs	Travel management costs continue at high levels without national direction.	Decreased agency planning costs because of known framework and established system.
User Benefits	Potential loss of recreation opportunities over time as use conflicts and environmental damage lead to route and area closures	Increased user benefits, including enhanced recreation opportunities, improved natural environmental setting, reduced user conflicts, and enhanced opportunities for cooperative construction and maintenance of routes because of long-term sustainability and legitimacy of route system.

Potential Impacts	Current Rule	Final Rule		
		Potential decrease in some user benefits because of loss of unconstrained cross-country motor vehicle use.		
Environment	Erosion, sedimentation, and damage to fish and wildlife habitat from unmanaged cross-country motor vehicle use.	Increased environmental benefits due to reduction in erosion, sedimentation, and habitat destruction that result from unmanaged cross-country motor vehicle use.		

B. Economic Impacts

The assessment of economic impacts attempts to identify potential effects that Forest Service travel management planning may have on the economic impact area. In particular, this analysis is used to address the questions: (1) would changes in the management of the Bitterroot National Forest for recreation and the amount of change in the motorized/nonmotorized designation of Forest roads and trails be large enough or significant enough to cause measurable economic changes? (2) Is the economy of the local area diverse enough and robust enough that the proposed changes will be insignificant or will they be felt in very specific segments of the local economy?

When looking at potential impacts associated with each alternative, consider the total (direct, indirect, and induced) response coefficients for economic impacts associated with any increase or decrease of 1,000 party trips for each activity presented below in Table 3.4-11. Detailed quantified speculation of changes to tourism and recreation visitation in the two economic impact area counties would be required to estimate the direct and multiplier (indirect and induced) economic impacts of any changes in management. This data is not available, and there is no literature suggesting how travel management specifically influences overall use and spending. Tools are provided for the reader to produce their own estimates of impacts and future economic contributions.

Bitterroot National Forest party sizes average 2.4 visits per party, but range by activity type and user category (e.g., local overnight, non-local day use) from 1.3 to 3.1 (for bicyclists: local day = 1.8, non-local day = 2.1, local overnight = 2.2 and non-local overnight = 2.3 visits per party trip). To simplify the response (impact) calculations, take any expected change in the number of activity visits to the Bitterroot National Forest, associated with travel management, and divide these by the appropriate average number of visits per party visit, and then divide by 1,000. Then multiply the result with the response coefficients. Or you can start from the existing number of party trips found in Table 3.4-4. For example, suppose someone expected a reduction representing one half of the existing non-local bicycling visits each year, from roughly 1,837 party trips each year down to 919. For this example, this could mean roughly 919 fewer non-local bicycle day use party trips each year. Divide this by 1,000 to match up with the 1,000 party trip response coefficients.

Estimates in the Recreation Economic Contribution Analysis in the project record {Project File folder 'economic_social,' Project File document ECONOMIC-004.pdf} suggest that roughly one of every three (34 percent) of non-local bicycle party trips are day trips only and two of every three involve an overnight stay. So a weighted response coefficient could be estimated by referring to Table 3.4-11. An approximate employment response coefficient would be ((0.34*0.516) + (0.66*2.398)) = 1.758 jobs per 1,000 non-local party trips). Likewise, an approximate labor response coefficient would be ((0.34 * \$10,987) + (0.66 * \$49,234)) = jobs per 1,000 non-local party trips. The result is less than one to two fewer jobs (1.758 * 0.919 = 1.62) and roughly \$33,295 less in labor income each year (\$36,230 * 0.919).

To calculate the new level of contributions, these jobs and labor income figures would need to be subtracted from the totals presented in the existing condition section. For example, non-local bicycling provided 3.2 total jobs (2.4 direct and 0.8 indirect and induced jobs). You would subtract 1.6 from this total and derive a new total of 1.6 total jobs per year. You would do the same for labor income; subtract \$33,295 from \$68,079 for an estimated \$34,784 in labor income each year. Note there is small rounding error here, explaining why removing half of the use did not cut the 32contributions exactly in half. This is because numbers presented for reader calculations were all rounded before recalculating.

For another example, suppose someone expected a reduction representing one third of the existing OHV visits each year, from roughly 23,250 visits each year down to 15,350. For this example, this could mean roughly 7,900 fewer OHV day use visits each year. This would be a reduction of roughly 3,291 OHV party trips leading to roughly 2 fewer jobs (0.558*3.291) and roughly \$42,933 (\$13,043*3.291) less in labor income each year. To calculate the new level of contributions, these jobs and labor income figures would need to be subtracted from the totals presented in the existing condition section.

These demonstrations explain how to estimate the impacts for changes any individual expects from any alternative. If additional national forest visits are anticipated than impacts would be additions to estimates of existing contributions instead of subtractions from estimates of existing contributions.

Economic Response Coefficients by Activity Type

Changes to access through travel planning have the potential to slightly impact the existing configuration of employment across numerous economic sectors that support tourism and recreation in the two counties in the economic impact area. Table 3.4-11 displays the estimated employment and labor income response coefficients (employment and labor income per 1,000 party trips, where party trips generally represent 2-3 national forest visits) for local and non-local motorized and nonmotorized activities. The response coefficients indicate the number of full and part-time jobs and dollars of labor income per 1,000 party trips by activity type. The response coefficients are useful in: 1) understanding the economic effects tied to a given use level; 2) understanding projected employment effects for various use scenarios described in other sections of this DEIS, and; 3) understanding the differences in employment effects by activity type.

As shown in Table 3.4-11, the economic effects tied to local visitation are generally lower than for non-local visitation. This is a result of local visitors spending less per visit in comparison to non-local visitors (see Table 3.4-4, above). Additionally, economic effects vary widely by activity type. Based on response coefficients, the strongest employment effect modeled is tied to non-local overnight cross-country skiing, followed closely by non-local snowmobiling. However, recent data for the Bitterroot National Forest shows very little cross-country skiing, and roughly 5,225 overnight snowmobiling party trips each year, where the visitors are using the Bitterroot National Forest. Of the local day response coefficients, local snowmobiling provides the highest response coefficients, followed by local OHV day use and then by cross country skiing. Smaller response coefficients are associated with local day horseback riding, backpacking, hiking/walking, and bicycling (Note: the response coefficients are identical for several of these categories since they share the same spending profiles). In general, economic effects associated with any change in management vary mainly by the total amount of spending and by the type of activity, but it cannot be generalized that motorized or nonmotorized activities contribute more or less to the local economy on a per visit basis.

Although most of the recreational use is from the local population residing within 50 miles of their recreation site, roughly half of the jobs and labor income contributed to the two-county area each year comes from non-local visitors. The overall contribution that recreation activities and associated spending make to the jobs and labor income of the economic impact area are currently less than one third of one percent, indicating that small changes to these spending levels would not have significant impacts to the impact area. In fact, collectively, all Forest Service employment and program expenditures, outputs, and services (including recreation) generally contribute roughly one to three percent of the jobs and labor income in the economic impact areas of Region 1 (Montana and Northern Idaho National Forests).

Table 3.4-11: Employment and Labor Income Response Coefficients by Activity Type¹

	Eı	mployment ,000 Party Trips)	Labor Income (\$ / 1,000 Party Trips)		
Nonmotorized Use	Day Total	Overnight Total	Day Total	Overnight Total	
Local Horseback Riding	0.261	1.129	\$6,051	\$24,784	
Non-local Horseback Riding	0.516	2.398	\$10,987	\$49,234	
Local Backpacking	NA	0.986	NA	\$22,785	
Non-local Backpacking	NA	1.145	NA	\$25,459	
Local Hiking / Walking	0.261	1.129	\$6,051	\$24,784	
Non-local Hiking / Walking	0.516	2.398	\$10,987	\$49,234	
Local Bicycling	0.261	1.129	\$6,051	\$24,784	
Non-local Bicycling	0.516	2.398	\$10,987	\$49,234	
Local Cross-country Skiing	0.496	2.462	\$10,534	\$49,872	
Non-local Cross-country Skiing	0.711	4.104	\$15,105	\$83,111	
Local Other Nonmotorized	0.261	1.129	\$6,051	\$24,784	
Non-local Other Nonmotorized	0.516	2.398	\$10,987	\$49,234	
Motorized Use					
Local OHV	0.558	0.990	\$13,043	\$22,210	
Non-local OHV	0.642	1.650	\$14,948	\$37,009	
Local Driving for Pleasure	0.287	1.254	\$6,429	\$24,878	
Non-local Driving for Pleasure	0.411	2.090	\$9,215	\$41,465	
Local Snowmobiling	0.799	2.290	\$18,819	\$45,809	
Non-local Snowmobiling	1.225	3.816	\$28,237	\$76,348	
Local Other Motorized Act.	0.558	0.990	\$13,043	\$22,210	
Non-local Other Motorized Act.	0.642	1.650	\$14,948	\$37,009	

¹ National Visitor Use Monitoring Data FY2007, IMPLAN 2006 Data, Stynes and White 2005

The potential recreational impacts, such as concentration and displacement noted in the Recreation and Trails analysis (Chapter 3, Section 3.2) of this FEIS, may impact individual vendors and service providers in the economic impact area. However, detailed quantified speculation of changes to tourism and recreation visitation in the two economic impact area counties would be required to estimate the direct and multiplier (indirect and induced) economic impacts. This data is not available. Some substitute recreation and travel opportunities persist inside and near the economic impact area, suggesting that any changes to the miles of roads and trails affected by the decision will have minimal impact on the overall economy of these two counties. It is important to remember that the lands affected by the Bitterroot Travel Planning Project decision are only a small part of the recreation and tourism opportunities in these two counties, compared with hiking, aloine and Nordic skiing, biking, rafting, guided and unguided fly fishing, and hunting opportunities in areas like Snowbowl Ski Area, Lost Trail Pass Ski Area, Chief Joseph Pass, the Clark Fork, Bitterroot and Blackfoot Rivers, the Rattlesnake Wilderness and National Recreation Area, the Anaconda Pintler Wilderness Area, the southern end of the Bob Marshall Wilderness Complex, and the Clearwater Game Range. The exact economic impacts of travel planning decisions would be hard to isolate from other cumulative effects of similar land management and travel planning efforts occurring in this portion of Montana.

The small change in type and quantity of use in the Bitterroot and Sapphire mountains would likely do little to affect county-level economic indicators (i.e. total employment, total personal income, average annual unemployment rate, and wildland dependency) for the two-county area. However, impacts that do occur may be felt strongly by a few vendors and service providers. The 2003 county percentages of economic dependence on recreation and wildlife (ranging from 0.4-3 percent) may decrease or increase slightly in

² Dollars are for 2008

the short-term. This could be considered a normal part of the shifts in economic dependence, typical among highly natural resource-dependent counties. This will likely be a mix of positive and negative impacts as new substitute nonmotorized recreation and motorized travel opportunities within a short drive may emerge, and they may moderate any impacts to many of these businesses from proposed Bitterroot National Forest travel planning changes. Proposed travel planning changes may also promote additional new business opportunities in the long term. In the event that changes in management lead to changes in use through the state of Montana, there could be small changes to the Montana Fish, Wildlife & Parks' program for trail maintenance.

C. Effects Common to All Action Alternatives

All action alternatives retain many miles of roads, trails, and areas open to motorized and nonmotorized activities on the Bitterroot National Forest. Consequently, Forest users, both local and non-local, will continue to visit the Forest, resulting in expenditures for goods and services including lodging, groceries, gasoline and oil, mechanical repairs, equipment rentals, restaurant meals, and employment opportunities, which would benefit the businesses and individuals in the towns and cities in the economic impact area.

Summer

Alternative 1

Alternative 1 would close 50 miles of roads open yearlong and seasonally, 55 miles (net) of trails for vehicles 50 inches or less in width open yearlong, and 203 miles (net) of motorcycle trails open yearlong. This would represent a decrease of 308 miles open for motorized use compared to **Alternative 2**. These changes would likely cause a collective shift in affected areas to more nonmotorized recreation, visitor expenditures, and economic contributions compared to motorized recreation. As indicated in Table 3.4-4, expenditures by OHV users are greater than those driving for pleasure. Given that the decrease in miles of ATV and motorcycle trails far exceeds the decrease in miles of roads, one would expect the shift in visits and subsequent expenditures by ATV users would have a greater impact compared to those associated with driving for pleasure.

Alternative 2, No Action

Since no changes would occur, the current economic contribution from all motorized and nonmotorized summer recreation is expected to persist into the future under this alternative.

Alternative 3

Alternative 3 would close about 6 miles (net) of roads open yearlong, open 19 miles (net) of trails for vehicles 50 inches or less in width seasonally, and open 69 miles (net) of motorcycle trails seasonally. This would represent an increase of 82 miles open for motorized use compared to Alternative 2. These changes could slightly shift the economic contribution in many areas from the current motorized/nonmotorized split to more motorized recreation visits, visitor expenditures, and economic contributions. As indicated in Table 3.4-4, expenditures by OHV users are greater than those driving for pleasure. Given the 82 mile increase in total miles open to motorized use (the increase in miles of ATV and motorcycle seasonally-open trails exceeds those closed yearlong, and more than offsets the 6 miles of roads closed yearlong and the 8 miles changed from open yearlong to seasonally open), one would expect an increase in visits and subsequent expenditures by ATV users would have a greater impact compared to those associated with driving for pleasure. This alternative is designed to retain and enhance persisting motorized opportunities and should moderate the amount of potential negative impacts resulting from loss of access to the nonmotorized recreational visitors.

Alternative 4

Alternative 4 would close approximately 452 miles of roads open yearlong and seasonally, roughly 534 miles of trails open to vehicles 50 inches or less in width open yearlong and seasonally, and about 392

miles of motorcycle trails open yearlong and seasonally. This would represent a decrease of 1,378 miles open for motorized use compared to **Alternative 2.** This alternative would likely cause the greatest shift from the current economic contributions in several communities to more nonmotorized recreation visits, visitor expenditures, and economic contributions, and less motorized use, expenditures and contributions. Again, as indicated in Table 3.4-3, expenditures by OHV users are greater than those driving for pleasure. Given that the decrease in miles of ATV and motorcycle trails far exceeds the decrease in miles of roads, one would expect the decrease in visits and subsequent expenditures by ATV users would have a greater impact to those associated with driving for pleasure.

Over-Snow

Alternative 1

Alternative 1 would reduce the number of acres open to over-snow vehicle use by approximately 184,533 acres compared to **Alternative 2**. As a result, it has the potential to retain most of the existing economic contribution that over-snow vehicle use makes to the economic impact area. There may be some additional nonmotorized opportunities and recreation impacts associated with new closures to motorized use.

Alternative 2 - No Action

Since no changes would occur, the current economic contribution from all motorized and nonmotorized over-snow recreation is expected to persist into the future.

Alternative 3

Alternative 3 would make a very slight (4,679 acres) increase in the number of acres open to over-snow vehicle use compared to **Alternative 2**. As a result it has the potential to retain the greatest portion of the existing economic contribution that over-snow vehicle use and associated backcountry skiing makes to the economic impact area. There may be some small, additional non-motorized opportunities and recreation impacts associated with new closures to motorized use.

Alternative 4

Alternative 4 would make a 388,543 acre reduction in the number of acres open to over-snow vehicle use. The decrease in open and seasonally-open acres could encourage new nonmotorized use, expenditures, and contributions.

Summary

Alternatives 1 and 4 would likely see a shift towards nonmotorized recreation, visitor expenditures, and economic contributions compared to motorized recreation. Alternative 3 would likely see a shift towards motorized recreation, visitor expenditures, and economic contributions compared to nonmotorized recreation. There would be no change with Alternative 2.

D. Budget and Affordability

Several comments were received on the DEIS that requested the Bitterroot National Forest consider the costs to operate and maintain trail and road systems that would exist under each travel planning alternative. The Forest's engineering staff tasked with road operations and maintenance provided information regarding the financial feasibility of the proposed alternatives.

Road construction and maintenance costs are difficult to estimate for the five road levels (refer to the Transportation analysis of this FEIS, Chapter 3, Section 3.1 for additional information) given the tremendous variability associated with location, current watershed condition (e.g., whether or not the road is in a 303(d)-listed watershed with total maximum daily load regulations), the seasons of use allowed on the segment, the current road surface, and other important site-specific factors.

The engineering staff suggests that there could be some small changes in the distribution of current funding based on changes in levels of use for various road segments, however, they do not expect significant changes in the budget used to maintain roads. Much of this maintenance work is done as a result of funding for essential best management practices for vegetation and fuel management projects derived from product and byproduct revenue, and is captured in transactions evidence appraisals and normal project financial feasibility analyses.

The Recreation and Trails analysis of this FEIS (Chapter 3, Section 3.2) contains details regarding proposed changes to the trails system. The following trail maintenance cost estimates, Table 3.4-12, are provided for work under any of the alternatives:

Table 3.4- 12: Estimated Trail Operation, Maintenance, and Improvement Costs for the Bitterroot
National Forest

MVUM Code	Trail Category	Estimated Cost (\$/Mile)
7	Trails open to vehicles 50" or less in width, yearlong	\$750 / mile
8	Trails open to vehicles 50" or less in width, seasonally	\$500 / mile
9	Trails open to motorcycles yearlong	\$325 / mile
10	Trails open to motorcycles seasonally	\$250/ mile
	New trail construction for 60 inch width ¹	\$17,000 / mile

¹ Trails constructed as connectors of roads or trails for OHV use (60 inch width tread, pack and saddle standard clearing limit: 8'x10', includes clearing, grubbing, excavation and rolling dip construction at 100' intervals. Mobilization \$cost/mile and Contracting Officer Representative's time for administration both included in this estimate

The following need to be considered along with the cost estimates:

- Ø A well designed motorized trail could cost less than this estimate.
- Ø Estimate is using actual figures for maintaining at less-than-optimum trail design.
- Ø Trails passing through burns will always cost more to maintain.
- Ø Estimates based on contracting costs. Estimates do not take Forest crew costs into account.

The following table, Table 3.4-13, displays the annual estimated costs associated with maintaining the road system on the Bitterroot National Forest, according to the prioritization methodology described in the Transportation analysis, Chapter 3, Section 3.1, of this FEIS:

Table 3.4-13: Bitterroot National Forest Estimated Road Maintenance Costs by Priority Level

Road Maintenance Priority	Miles By Category	Maintenance Cycle (years)	Miles Maintained Annually	Estimated Cost/Mile	Estimated Total Cost	
High-Priority Roads	150	1-2	150	\$1,500	\$225,000	
Moderate-Priority Roads	430	2-10	150	\$750	\$112,500	
Low-Priority Roads ¹	1,995	10+	50	\$200	\$10,000	
Estimated Annual Maintenance Cost \$347,500						

¹ Maintenance cycle estimated at a 10 year interval, but roads are also maintained on an as-needed basis

The Bitterroot National Forest has identified and is maintaining a base transportation system at current funding levels. As the technology for forest management evolves over the coming decades, so will the need for access across the National Forests. The resulting National Forest System roads will change with this evolution. As the Forest considers the sustainability of its transportation system, Forest managers must balance forest management needs and objectives, resource impacts, mitigations of those impacts, social benefits, and the costs of the associated transportations system. The Forest Service has been using adaptive

management in regards to motorized access since 1976. Individual projects evaluate the impacts of the road system on affected resources, and design features are identified, implemented, and evaluated for effectiveness. Monitoring the impacts of roads is ongoing, and future adjustments in travel management and the minimum transportation system will be made on a project-by-project basis. If funding levels remain consistent with what the Bitterroot National Forest has received over the past 7 years, the Forest has the ability to maintain the current road system. With 65,000 cubic yards of crushed aggregate stockpiled at a variety of locations, and the ability to haul and place the material with a road crew, the Forest will maintain improved aggregate surfaced roads and continue to show miles of road improved every year.

There is no road decommissioning specifically proposed by any of the travel management alternatives, which explains why no cost estimates are provided for this activity. As with other changes proposed under the travel management alternatives, the pace of implementation would depend on budgets and how travel management adjustment implementation compares with other National Forest management priorities.

A commenter on the Travel Management Planning Project DEIS asked the ID Team to consider a road maintenance model developed by Dr. Wing at the Forest Engineering Department, Oregon State University. The ID Team's Transportation Engineer and the Forest's Road Maintenance Supervisor reviewed the model, and determined that estimating funding needs by miles per maintenance level is not consistent with the approach used by Region 1 of the Forest Service; every mile of road is not maintained on an annual basis, and every mile of a certain maintenance level will not receive the same level of effort or attention. For additional information regarding the Wing model provided, please refer to {Project File folder 'transportation,' Project File document TRANS-003.pdf}.

E. Cumulative Effects

Geographic Boundaries

The defined cumulative effects analysis area for the Economic resource is larger than the economic impact area as it would include the Beaverhead-Deerlodge, Lolo, Salmon-Challis, and Nez Perce-Clearwater National Forests, which are adjacent to the Bitterroot National Forest, as well as state and private lands.

Analysis of the National Visitor Use Monitoring (NVUM) data for the period from October 2006 through September 2007 revealed that approximately 88.5 percent of visitors to the Bitterroot National Forest were local (reported to be living with 50 miles of the Forest boundary). The Forests listed above are within this distance from the Bitterroot National Forest, and users on those forests could recreate on this Forest. This analysis area is appropriate to analyze any incremental effects from the actions of this project in combination with past, present, and reasonably foreseeable activities because the effects of implementing travel management planning decisions on these forests could have potential cumulative effects on the Economic and Social resource on the Bitterroot National Forest.

Activities Within the Cumulative Effects Analysis Area

Past actions have contributed to the existing economic and social conditions, which is described in Section 3.4.3 (Affected Environment).

Appendix A to the FEIS describes past, present, and reasonably foreseeable forest and other activities, which, when combined with the activities proposed in the Travel Management Planning Project, could result in cumulative effects to people.

Summer

There are forest activities which could result in cumulative effects to the Economic and Social resource:

Personal Use Firewood Cutting and Christmas Tree Harvesting

On one hand, these activities could impact the economic impact area by allowing competition with retail providers of firewood and Christmas Trees. However, there would be expenditures for gasoline and oil,

chainsaws and related supplies, food, and other items associated with these activities which would benefit businesses in the economic impact area.

On the other hand, allowing these activities provides the residents of the economic impact area an alternative to purchasing firewood and Christmas Trees from retail locations.

Additionally, they result in a beneficial cumulative effect on the social resource through the opportunity for individuals and families to socialize as they participate in these activities.

Timber Harvest, Prescribed Burning, and Associated Activities

Timber harvest, thinning, and hauling would contribute to the economic impact area by providing direct jobs and other economic contributions, including payments for lodging (for non-local contractors), gasoline, food, meals, and other items to the economic impact area. These activities would have beneficial cumulative effects.

Similarly, tree planting, precommercial thinning, and collection of other forest products would also provide jobs and other economic benefits to the economic impact area.

Cattle Grazing

Approximately 1,385 cow/calf pairs are authorized to graze for varying lengths of time between May 15 and October 31; a total of 5,915 animal unit months. Cattle grazing provides jobs and other economic benefits to the economic impact area. This would have a beneficial cumulative effect.

Invasive Plants Management

Noxious weed treatment would provide jobs and other economic benefits to the economic impact area. Additionally, it would restrict noxious weeds from out-competing native vegetation, which would prevent loss of cattle forage. Without noxious weed management, grazing permittees may incur costs to provide supplemental feed. Noxious weed treatment would have a beneficial cumulative effect.

Wildfire Suppression

Efforts to control wildfires would provide jobs and other economic benefits to the economic impact area. Additionally, these efforts will help protect property and resources from being damaged or destroyed by wildfires, diminishing or avoiding private and public financial losses. This activity would have a beneficial cumulative effect.

Road and Trail Management

Road maintenance would provide jobs and other economic benefits, including payments for gasoline and food, to the economic impact area. The Forest Service utilizes private contractors to perform maintenance activities such as road blading, cleaning ditches and culverts, and installing culverts. Contractors are also used for trail maintenance, construction, and reconstruction. These activities would have a beneficial cumulative effect.

Special Uses\Permits

Outfitters\guides would contribute to the economic impact area by providing jobs and other economic benefits including payments for lodging (for non-local clients), gasoline, food, meals, and other items. This would have a beneficial cumulative effect. The use of crushed stone and construction sand and gravel from the Forest would provide jobs and other economic benefits to the economic impact area. This would have a beneficial cumulative effect.

Public Use

Recreational use would provide economic benefits, including retail purchases and payments for lodging, gasoline, food, meals, and other items, to the economic impact area. These would have a beneficial cumulative effect.

Activities on Private, State, and Federal Lands

Similar activities on private and state lands may provide jobs and other economic benefits to the economic impact area. These would also have beneficial cumulative effects.

Wildfires

Wildfires are expected to play an increased role across the Bitterroot National Forest due to trends of increased warming and drying. Depending upon their location and duration, wildfires could result in temporary-to-long term restrictions and closures on public use of Forest roads, trails, and areas due to safety concerns. These actions could negatively impact forest visitation, with subsequent declines in economic benefits, including retail purchases and payments for lodging, gasoline, food, meals, outfitter/guide services, and other items, to the economic impact area.

Natural Disturbance Events

Natural disturbance events such as blowdowns, floods, and mass movement events could result in temporary-to-long-term closures of public use of Forest roads, trails, and areas due to safety concerns. Blowdowns commonly cause trees to fall across roads, blocking access. Flooding can cause culverts and road beds to wash out. Mass movements in the form of debris torrents and debris avalanches can block roads. These events could negatively impact forest visitation, with subsequent declines in economic benefits, including retail purchases and payments for lodging, gasoline, food, meals, outfitter/guide services, and other items, to the economic impact area.

Over-Snow

Most roads, trails, and areas would be snow-covered during the winter months, which would preclude many forest activities, such as cattle grazing, invasive plants management, mining, wildfire suppression, and road and trail management from occurring. Public use, some special uses (outfitter\guides), motorized activities on state and private lands, and timber harvest projects would be occurring, resulting in economic benefits to the economic impact area.

Cumulative Effects from the Implementation of the Alternatives

Alternative 1

Most of the above-listed present and reasonably foreseeable activities would have beneficial cumulative effects on the Economic and social resource in the economic impact area, in combination with the activities proposed in the Travel Management Planning Project. Wildfires and natural disturbance events would likely have adverse cumulative effects.

Alternative 2

Most of the above-listed present and reasonably foreseeable activities would have beneficial cumulative effects on the Economic and Social resource in the economic impact area, in combination with the activities proposed in the Travel Management Planning Project. Wildfires and natural disturbance events would likely have adverse cumulative effects.

Alternative 3

Most of the above-listed present and reasonably foreseeable activities would have beneficial cumulative effects on the Economic and Social resource in the economic impact area, in combination with the activities proposed in the Travel Management Planning Project. Wildfires and natural disturbance events would likely have adverse cumulative effects.

Alternative 4

Most of the above-listed present and reasonably foreseeable activities would have beneficial cumulative effects on the Economic and Social resource in the economic impact area, in combination with the activities

proposed in the Travel Management Planning Project. Wildfires and natural disturbance events would likely have adverse cumulative effects.

Cumulative Effects Finding

Most of the above-listed present and reasonably foreseeable activities would have beneficial cumulative effects on the Social and Economic resource, in combination with Alternatives 1, 2, 3, and 4 of the Travel Management Planning Project.

3.4.5 Consistency With Forest Plan, Laws, And Regulations

The Travel Management Planning Project is essentially a planning effort, and does not create new ground disturbance. As such, consistency with existing regulation is a matter of incorporating various concerns into the planning effort. This has been done in all phases of the project.

A. Bitterroot National Forest Plan

Forest-wide Management Standards and Management Area Standards:

There are no Bitterroot Forest Plan forest-wide resource standards or management area standards, or other laws and regulations, which give direction to the Forest Service to manage for the economic benefit of local areas.

3.4.6 CHANGES BETWEEN DRAFT EIS AND FINAL EIS

- Ø Minor grammatical edits were made to correct typographical errors and to improve readability.
- Ø Section 3.4.1 D (Weaknesses, Limitations, and Assumptions of Analysis Methods). Discussion regarding the money spent on goods and services associated with the power sports industry was added in response to comments on the DEIS.
- Ø Section 3.4.3 G (Recreational National Forest Use, Social Issues, and Conflict). Discussion regarding the aging of the population was added in response to comments on the DEIS.
- Ø Section 3.4.3 G (Recreational National Forest Use, Social Issues, and Conflict). Figure 3.4-3 was added in response to comments on the DEIS. In addition, information regarding the analysis of OHV use and the economic impacts was added in response to comments on the DEIS.
- Ø Section 3.4.3 H (Bitterroot National Forest Budget Trend). Table 3.4-7 was edited to include funding through 2013. The discussion titled Funding for Trail Operations, Maintenance, and Improvements, including Table 3.4-8, was added in response to comments on the DEIS. The discussion titled Funding for Road Maintenance and Improvements, including Table 3.4-9, was also added in response to comments on the DEIS.
- Ø Section 3.4.4 B (Economic Impacts). The example in the third paragraph was edited to make it specific to bicycle use. And, a second example was added to provide clarification.
- Ø Section 3.4.4 C (Cumulative Effects). Added Wildfires and Natural Disturbance Events. Effects associated with over-snow vehicle use were added.
- Ø Section 3.4.5 (Consistency with Forest Plan, Laws, and Regulations). Rewritten to provide clarity and organization.